

Murata Power Solutions' latest

# DC-DC Converters

## Isolated

Single, dual & triple output: <1W to 450W

## Non-isolated

Point-of-Load: 1A to 16A



# Powering innovation...

Your preferred power partner...



## About Murata Power Solutions

We are the #1 supplier of board mount power and among the top suppliers of overall power electronics.

From 0.25W isolated converters to 2100W front-end power supplies, along with filtering and isolation solutions, our current offering exceeds 3,500 standard models developed in our design and manufacturing centers located in the US, Canada, England, Japan and China. Murata's worldwide network of technical

sales managers, FAEs, customer support and industry-leading distributors, reliably support the power requirements of local and global manufacturers of telecommunications equipment, data management systems, industrial controls, transportation electronics, energy systems, and more.

## Our DC-DC Converters

This catalog provides specifications for our entire offering of:

### Point-of-Load converters

- DOSA compatible designs
- OKAMI, the new breed of DC-DCs

### Isolated DC to DC converter products

- Single, dual, and triple output
- Power from 0.25 to 450 Watts; currents from 0.02 to 50 Amps

### Bricks

- DOSA compliant 1/32 to 1/2
- 1 x 1" and 2 x 2" encapsulated

### To sum it all up for you, Murata Power Solutions delivers:

- ✓ Innovation and reliability
- ✓ The largest variety of industry-standard DC/DCs
- ✓ Modified-standards and custom design expertise

...delivering innovative solutions you can rely on, again and again

## How to use this databook

Products are listed according to output voltage.

1

### Find

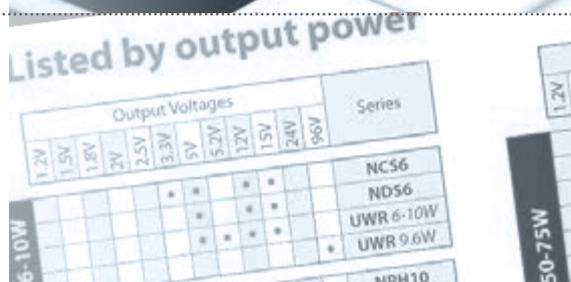
your output voltage from the product data tables



2

### Refer

to quick selection guides for Output power (isolated) Output current (PoLs)



3

### Choose

the ideal product series for your application



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### Visit

**murata-ps.com** for data sheets and complete specifications



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# Point-of-Load

## Non-isolated DC DC converter series

Murata Power Solutions offers more non-isolated, point-of-load (PoL) DC-DCs, in standard packages and pinouts, than any other company.



Our PoL output voltages range from 0.75 to 6V at current levels from 2 to 50A. Input voltages are centered around traditional 3, 5 and 12V levels, with some devices operating from 7.5 to 40V. Standard packages include SMT and SIP models.

The newest Okami SMT and SIP models

offer user programmable outputs (0.6-15.5V) while operating from wide-range inputs (2.4-5.5V, 2.9-14V, 4.5-14V, 6-14V, 8.3-14V, 9-32V, 16-40V, or 19-40V). For many applications, they can be genuine “one-size-fits-all” solutions.

PoLs may be powered from AC to DC

converters and DC to DC regulators, among other design options. Also, many designers find them a quick, cost-effective solution when isolation is not required and in-house designs are too expensive and time consuming.

## User programmable output voltages

Part Number* <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Output Characteristics			Input Voltage			Efficiency	Package				Package Dimensions						Datasheet Available at <a href="http://www.murata-ps.com">www.murata-ps.com</a>	
	Rated Output Current	Rated Output Voltage	Total Output Power	Nom.	Min.	Max.		SM	TH	DIP	SIP	Inches			mm				
												L	W	H	L	W	H		
<b>OKL-T/1-W12x-C*</b>	<b>1A</b>	0.9-5.5V	5W	12V	2.9V	14V	90%	•				0.49	0.18	0.49	12.4	4.57	12.4	OKL-T/1-W12	
<b>OKR-T/1.5-W12-C</b>	<b>1.5A</b>	0.591-6V	7.5W		4.5V		93%			•	0.41	0.24	0.40	10.4	6.1	10.16	OKR-T/1.5-W12		
<b>OKI-T/3-W32x-C*</b>	<b>3A</b>	0.7525-4.5V	13.5W	24V	9V	32	89%	•				0.82	0.34	0.47	11.9	8.5	11.9	OKI-T/3-W32	
<b>OKI-T/3-W40x-C*</b>		0.7525-5.5V	15W		16V		40V	88%	•			0.82	0.34	0.47	11.9	8.5	11.9	OKI-T/3-W40	
<b>OKI-T/36W-W40x-C*</b>		5.021-15.5V	36W	19V	95%	•					0.82	0.34	0.47	11.9	8.6	11.9	OKI-T/36W-W40		
<b>OKL-T/3-W5x-C*</b>		0.6-3.63V	9.9W	5V	2.4V	5.5V	93%	•					0.48	0.24	0.48	12.2	6.2	12.2	OKL-T/3-W5
<b>OKL-T/3-W12x-C*</b>		0.591-5.5V	15W	12V	4.5V	14V	93%	•					0.48	0.24	0.48	12.2	6.2	12.2	OKL-T/3-W12
<b>OKX-T/3-D12-C</b>		0.75-5.5V			8.3V		93%	•				0.40	0.09	0.28	10.16	22.9	7.2	OKX-T/3-D12	
<b>OKY-T/3-D12x-C*</b>			0.47	0.082	0.28	11.9	20.8	7.0	OKY-T/3, T/5-D12										
<b>OKX-T/3-W5-C</b>		0.40	0.09	0.28	10.16	22.9	7.2	OKX-T/3-W5											
<b>OKY-T/3-W5x-C*</b>		0.7525-3.63V	9.9W	5V	2.4V	5.5V	94%	•					0.47	0.082	0.28	11.9	20.8	7.0	OKY-T/3, T/5-W5
<b>OKR-T/3-W12-C</b>		0.591-6V	15W	12V	4.5V	14V	93%			•	0.65	0.22	0.41	10.4	5.6	10.4	OKR-T/3-W12		
<b>OKX-T/5-D12-C</b>	0.75-5.5V	25W	8.3V		93%			•				0.40	0.09	0.28	10.16	22.9	7.2	OKX-T/5-D12	
<b>OKY-T/5-D12x-C*</b>			0.47	0.082	0.28	11.9	20.8	7.0	OKY-T/3, T/5-D12										
<b>OKX-T/5-W5-C</b>	0.40	0.09	0.28	10.16	22.9	7.2	OKX-T/5-W5												
<b>OKY-T/5-W5x-C*</b>	0.7525-3.63V	16.5W	5V	2.4V	5.5V	94%	•					0.47	0.082	0.28	11.9	20.8	7.0	OKY-T/3, T/5-W5	
<b>OKL-T/6-W5x-C*</b>	0.6-3.3V	19.8W	12	4.5V	14V	93%	•					0.48	0.28	0.48	12.2	7.2	12.2	OKL-T/6-W5	
<b>OKL-T/6-W12x-C*</b>	0.591-5.5V	30W					96%	•	0.65	0.3	0.41	10.4	7.6	10.4	OKR-T/6-W12				
<b>OKR-T/6-W12-C</b>			0.591-6V	50W	92%	•	0.65	0.3	0.41	10.4	7.6	10.4	OKR-T/10-W12						
<b>OKR-T/10-W12-C</b>	0.7525-5.5V	95%	•		0.5	0.37	2	50.8	9.4	50.8	OKX-T/10, T/16-D12								
<b>OKX-T/10-D12x-C*</b>	0.7525-5.5V	33W	5V	2.4V	5.5V	96%			•	2	0.5	0.37	9.4	12.7	9.4	OKX-T/10, T/16-W5			
<b>OKY-T/10-W5x-C*</b>	0.7525-5.5V	50W	12V	8.3V	14V	95%	•					0.53	0.33	1.3	33	8.4	33	OKY-T/10, T/16-D12	
<b>OKY-T/10-D12x-C*</b>	0.7525-3.63V	33W	5V	2.4V	5.5V		95%	•					1.3	0.33	0.53	13.5	8.3	13.5	OKY-T/10, T/16-W5
<b>OKY-T/10-W5x-C*</b>	0.7525-5.5V	80W	12V	8.3V	14V	94%			•	0.5	0.37	2	50.8	9.4	50.8	OKX-T/10, T/16-D12			
<b>OKX-T/16-D12x-C*</b>	0.7525-3.63V	52.8W	5V	2.4V	5.5V	95%			•	2	0.5	0.37	9.4	12.7	9.4	OKX-T/10, T/16-W5			
<b>OKY-T/16-D12x-C*</b>	0.7525-5.5V	80W	12V	8.3V	14V	94%	•					0.53	0.33	1.3	33	8.4	33	OKY-T/10, T/16-D12	
<b>OKY-T/16-W5x-C*</b>	0.7525-3.63V	52.8W	5V	2.4V	5.5V	95%	•					1.3	0.33	0.53	13.5	8.3	13.5	OKY-T/10, T/16-W5	
<b>OKDx-T/40-W12-C**</b>	<b>40A</b>	0.6-3.3V	132W	12	4.5V	14V	95%	•	•	•	1.215	0.787	0.323	30.85	20.0	8.2	OKDx-T/40-W12		

\*x = N (negative) or P (positive) logic  
\*\* x = Form factor

## OKI-78SR Series fixed output voltages

<b>OKI-78SR3.3/1.5-W36-C</b>	<b>1.5A</b>	3.3V	4.95W	24V	7V	36V	86%	•	0.65	0.3	0.41	16.5	7.62	10.4	OKI-78SR
<b>OKI-78SR3.3/1.5-W36H-C</b>								•	0.65	0.3	0.41	16.5	7.62	10.4	
<b>OKI-78SR5/1.5-W36-C</b>		5V	7.5W	91%	•	0.65	0.3	0.41	16.5	7.62	10.4				
<b>OKI-78SR5/1.5-W36H-C</b>					•	0.65	0.3	0.41	16.5	7.62	10.4				

# Single output

## Isolated DC to DC converter series

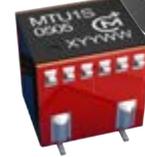
Power from 0.25 to 300 Watts; currents from 0.02 to 80 Amps; voltages from 1.2 to 96 Volts; inputs from 3 to 75 Volts ...Murata Power Solutions offers the broadest line of single-output, isolated DC/DC converters in the entire power industry ...without a doubt.

Our low-power encapsulated products (mini SIPs, DIPs and SMDs) are among the smallest available. Many use contemporary ceramic-substrates and copper-lead-frame technologies to achieve their small size.

At the other extreme, our high-power 1/32, 1/16, 1/8, 1/4, and 1/2 bricks are open-frame assemblies using multi-layer, heavy-copper

pc boards and planar magnetics. Their high efficiencies enable full-power operation to high ambient temperatures, and optional baseplates deliver the best thermal performance in the industry.

If you can't find the DC/DC power solution you need in the tables below, contact us, and we'll develop one for you.



## Quick selection guide listed by output power

Power Range	Output Voltages							Series	
	3.3V	5V	6V	9V	12V	15V	20V		24V
<1W	•	•			•				CME
	•	•							CMR
	•		•	•	•	•			LME
	•		•	•	•	•			NMF
1-2W	•	•			•				MEE1
	•	•			•				MEF1
	•				•				MEJ1
	•				•				MER1
	•				•				MEU1
	•				•				MEV1
	•							•	MMV1
	•	•	•	•	•	•			MTE1
	•	•	•	•	•	•			MTU1
	•	•	•	•	•	•			NCS1
	•	•	•	•	•	•			NKE
	•	•	•	•	•	•		•	NME
	•	•	•	•	•	•			NMJ
	•	•	•	•	•	•			NMR
	•	•	•	•	•	•			NMV
	•	•	•	•	•	•			NTE
•	•	•	•	•	•			PWR13XXC	
2-3W	•	•			•				NDL
	•	•			•				MEJ2
	•	•			•			•	MTU2
	•				•				NMG
	•				•				NMK
3-4W	•	•			•				MEE3
	•	•			•				MEV3
	•	•			•				NDTS
	•	•			•				NDY

Power Range	Output Voltages											Series	
	1.2V	1.5V	1.8V	2.5V	3.3V	5V	5.2V	12V	15V	24V	96V		
6-10W					•	•		•	•				NCM6
					•	•		•	•				NCS6
					•	•		•	•				NDS6
						•						•	UWR 9.6W
10-12W					•	•		•	•				NPH10
					•	•		•	•				NCS12
15-18W					•	•		•	•				NPH15
					•	•		•	•				RUW15
					•	•		•	•				SPM15
					•	•		•	•				UEI15
18-25W					•	•		•	•				UEI25
					•	•		•	•				UHE 12-30W
25-35W					•	•		•	•				SPM25
					•	•		•	•				UEI30
					•	•		•	•				ULS-30W
					•	•		•	•				ULT
35-50W					•			•					UEI 50-60W
					•			•					UEE
					•			•					UWS

Power Range	Output Voltages														Series			
	1.2V	1.5V	1.8V	2.5V	3.3V	5V	8.3V	12V	15V	18V	24V	28V	29V	48V		53V	54V	
50-75W								•	•									UEI 50-60W
								•	•									ULE
								•	•								•	ULS
								•	•									UVQ
								•	•									
75-100W																		PAE
																		UEE
																		ULS 100W
																		UQQ
100-120W																		UWE 100-120W
																		UWE 100-120W
120-240W																		EMH
																		HPQ 165W
																		HPQ 182.6W
																		PAQ
300-450W																		UEE 150W
																		UWQ
																		HPQ 300W
																		PAH 350W
																		PAH 450W

## Single output isolated

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style								Package Dimensions						Further Information								
Rated Output Voltage	Rated Output Current	Total Output Power	Nom.	Min.	Max.			Bricks								Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet <i>Available at www.murata-ps.com</i>							
								1/32	1/16	1/8	1/4	1/2	SM	TH	DIP	SIP	L	W	H	L	W			H						
3.3V	0.227A	0.75W	3.3V	2.97V	3.63V	3kV	73%											•	0.45	0.236	0.293	11.48	6	7.46	CME0303S3C	CME				
	0.3A	1W	3.3V	2.97V	3.63V	1kV	76%											•	0.39	0.45	0.27	9.8	11.5	6.8	MEE1S0303DC	MEE1				
							76%												•	0.24	0.45	0.39	6	11.5	10		MEE1S0303SC			
							76%														•	0.327	0.240	0.313	8.3	6.1	7.95	MEU1S0303ZC	MEU1	
							78%														•	0.5	0.43	0.27	12.7	11	7.05	MTE1S0303MC	MTE1	
							73%														•	0.30	0.5	0.26	7.7	12.7	6.6	NTE0303MC	NTE	
							3kV	75%														•	0.39	0.45	0.21	9.8	11.5	5.4	NKE0303DC	NKE
																						•	0.24	0.45	0.29	6	11.5	7.5	NKE0303SC	
							5.2kV	70%														•	0.77	0.390	0.50	19.5	9.95	12.65	MEJ1S0303SC	MEJ1
								66%														•	0.39	0.77	0.49	9.8	19.5	12.5	NMJ0303SAC	NMJ
							3.3V	3.14V	3.47V	1kV	3kV	66%										•	0.774	0.242	0.40	19.65	6.15	10.15	MEF1S0303SPC	MEF1
																		•	0.774	0.242	0.40	19.65	6.15	10.15	MEF1S0303SP3C					
	5V	4.5V	5.5V	1kV	76%											•	0.39	0.45	0.27	9.8	11.5	6.8	MEE1S0503DC	MEE1						
					77%											•	0.24	0.45	0.39	6	11.5	10	MEE1S0503SC							
					79%													•	0.327	0.240	0.313	8.3	6.1	7.95	MEU1S0503ZC	MEU1				
					74%													•	0.5	0.43	0.27	12.7	11	7.05	MTE1S0503MC	MTE1				
					3kV	75%													•	0.39	0.45	0.21	9.8	11.5	5.4	NKE0503DC	NKE			
																			•	0.24	0.45	0.29	6	11.5	7.5	NKE0503SC				
					5.2kV	69%													•	0.77	0.390	0.50	19.5	9.95	12.65	MEJ1S0503SC	MEJ1			
						64%													•	0.39	0.77	0.49	9.8	19.5	12.5	NMJ0503SAC	NMJ			
					5V	4.75V	5.25V	1kV	3kV	68.5%										•	0.774	0.242	0.40	19.65	6.15	10.15	MEF1S0503SPC	MEF1		
																						•	0.774	0.242	0.40	19.65	6.15		10.15	MEF1S0503SP3C
	12V	4.5V	18V	1kV	77%										•	0.861	0.323	0.445	21.87	8.2	11.30	NCS1S1203SC	NCS1							
	12V	10.8V	13.2V	5.2kV	72%										•	0.77	0.390	0.50	19.5	9.95	12.65	MEJ1S1203SC	MEJ1							
	12V	11.4V	12.6V	1kV	3kV	69%										•	0.774	0.242	0.40	19.65	6.15	10.15	MEF1S1203SPC	MEF1						
																		•	0.774	0.242	0.40	19.65	6.15		10.15	MEF1S1203SP3C				
	24V	9V	36V	1kV	78.5%										•	0.861	0.323	0.445	21.87	8.2	11.30	NCS1S2403SC	NCS1							
	24V	22.8V	25.2V	1kV	3kV	69%										•	0.774	0.242	0.40	19.65	6.15	10.15	MEF1S2403SPC	MEF1						
																		•	0.774	0.242	0.40	19.65	6.15		10.15	MEF1S2403SP3C				
	0.606A	2W	3.3V	2.97	3.63	5.2kV	70%									•	0.77	0.39	0.5	19.65	9.95	12.65	MEJ2S0303SC	MEJ2						
			5V	4.5V	5.5V												•	0.77	0.39	0.5	19.65	9.95	12.65		MEJ2S0503SC					
			12	10.8V	13.2V													•	0.77	0.39	0.5	19.65	9.95		12.65	MEJ2S1203SC				
	0.9A	3W	5V	4.5V	9V	1kV	63%									•	0.58	1.27	0.28	14.7	32.3	7	NDTS0503C	NDTS						
			12V	9V	18V	1kV	71%									•	0.58	1.27	0.28	14.7	32.3	7	NDTS1203C							
			24V	18V	36V	1kV	71%										•	0.58	1.27	0.28	14.7	32.3	7		NDTS2403C					
							70%												•	0.58	1.27	0.28	14.7		32.3	7	NDY2403C			
			48V	36V	72V	1kV	71%										•	0.58	1.27	0.28	14.7	32.3	7		NDTS4803C					
	1.52A	6W	12V	9V	36V	1.5kV	78%									•	1.26	0.79	0.39	32	20	10	NCS6S1203C	NCS6						
			48V	18V	75V		76%									•	1.26	0.79	0.39	32	20	10	NCS6S4803C							
			5V	4.5V	9V	5.2kV	75%										•	1.26	0.787	0.423	32	20	10.75	NCM6S0503C	NCM6					
12V			9V	36V	79%											•	1.26	0.787	0.423	32	20	10.75	NCM6S1203C							
48V			18V	75V	74%											•	1.26	0.787	0.423	32	20	10.75	NCM6S4803C							
2.94A	10W	24V	18V	36V	1.5kV	79%									•	0.98	1.26	0.39	25	32	10	NPH10S2403EIC	NPH10S							
		48V	36V	75V	1.5kV	80%									•	0.98	1.26	0.39	25	32	10	NPH10S4803EIC								
																		•	0.98	1.26	0.39	25		32	10	NPH10S4803IC				
3.64A	12W	12V	9V	36V	1.5kV	83.5%									•	1.26	0.787	0.394	32	20	10	NCS12S1203C	NCS12							
		48V	18V	75V		85.5%									•	1.26	0.787	0.394	32	20	10	NCS12S4803C								
4.4A	15W	24V	18V	36V	1.5kV	81%									•	1	2	0.39	25	50	10	NPH15S2403EIC	NPH15S							
																		•	1	2	0.39	25		50	10	NPH15S2403IC				
		48V	36V	75V	1.5kV	83%										•	1	2	0.39	25	50	10		NPH15S4803EIC						
																•	1	2	0.39	25	50	10	NPH15S4803IC							
4.5A	14.9W	24V	9V	36V	1.5kV	87.5%									•	1.1	0.96	0.36	27.9	24.4	9.1	UEI15-033-Q12P-C	UEI 15W							
5A	16.5W	48V	18V	75V	1.5kV	88%									•	1.1	0.96	0.36	27.9	24.4	9.1	UEI15-033-Q48NR-C								

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style							Package Dimensions						Further Information												
Rated Output Voltage	Rated Output Current	Total Output Power	Nom.	Min.	Max.			Bricks							Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet Available at <a href="http://www.murata-ps.com">www.murata-ps.com</a>											
								1/32	1/16	1/8	1/4	1/2	SM	TH	DIP	SIP	L	W	H	L			W	H									
3.3V	7.5A	24.75W	24V	9V	36V	1.5kV	88%											2	1.6	0.4	50.8	40.6	10.2	UHE-3.3/7500-Q12-C	UHE12-30W								
				18V			89.5%												2	1.6	0.4	50.8	40.6	10.2		UHE-3.3/7500-Q48-C							
					48V	36V	75V	1.5kV	85.5%											0.92	0.75	0.35	23.4	19.1		8.9	ULT-3.3/7.5-D48	ULT					
								91%														2	1.6	0.4		50.8	40.6	10.2	UHE-3.3/7500-D48-C	UHE12-30W			
								1.6kV	89.5%														1	1		0.41	25.4	25.4	10.4	SPM25-033-D48	SPM25		
		25W				2.25kV													1.1	0.32	0.96	27.9	8.13	24.4	UEI25-033-D48	UEI25							
		8A	26.4W	48V	36V	75V	2.25kV	90%												0.9	1.3	0.36	22.9	33	9.14	ULS-3.3/8-D48	ULS-30W						
		9A	29.7W	24V	9V	36V	2.25kV	89%												1.92	0.35	0.92	48.8	8.9	23.4	UEI30-033-Q12P-C	UEI30						
				48V	18V	75V	2.25kV	89.5%													1.92	0.35	0.92	48.8	8.9	23.4		UEI30-033-Q48N-C					
		15A	49.5W	24V	9V	36V	1.5kV	87.5%												1.95	1.55	0.375	49.5	39.4	9.5	UEI-3.3/15-Q12PR-C	UEI-50/60						
				48V	18V	75V	2.25kV	89%														0.91	1.31	0.36	23.1	33.27	9.14	UWS-3.3/15-Q48	UWS				
			50W	48V	36V	75V	2.25kV	90%													2.3	0.9	0.4	58.4	22.9	10.2	UEE-3.3/15-D48	UEE					
		18A	59.4W	48V	18V	75V	2.25kV	89.5%													1.95	1.55	0.375	49.5	39.4	9.5	UEI-3.3/18-Q48N-R-C	UEI-50/60					
		20A	66W	12V	9V	36V	2.25kV	89%													2.3	0.38	0.9	58.4	9.7	22.9	UWE-3.3/20-Q12P-C	UWE					
				24V	18V	36V	2kV	89%														2.3	0.9	0.41	58.4	22.9	10.4	ULE-3.3/20-D24P-C	ULE20A				
		20A	66W	48V	18V	75V	2.25kV	89.5%													2.3	0.38	0.9	58.4	9.7	22.9	UWE-3.3/20-Q48N-C	UWE					
								89%														2.3	0.9	0.41	58.4	22.9	10.4	ULE-3.3/20-D48N-C	ULE20A				
					48V	36V	75V	2.25kV	90%														1.3	0.4	0.9	33.02	10.16	22.86	ULS-3.3/20-D48N-C	ULS			
		25A	82.5W	48V	18V	75V	2.25kV	90%													2.3	0.9	0.4	58.4	22.9	10.2	UEE-3.3/25-D48	UEE					
					12V	9V	36V	2kV	88%													2.22	1.45	0.43	56.4	36.8	10.9	UQQ-3.3/25-Q12P-C	UQQ 7-15A				
				48V	18V	75V	2.25kV	88.5%													2.22	1.45	0.43	56.4	36.8	10.9	UQQ-3.3/25-Q48N-C						
	30A	99W	18V	75V	2.25kV	89.5%														2.3	0.9	0.39	58.4	22.9	9.9	UWE-3.3/30-Q48-C	UWE-100-120W						
				48V	36V	75V	2.25kV	90%													2.3	0.9	0.4	58.4	22.9	10.2	UEE-3.3/30-D48	UEE					
							91%															1.3	0.9	0.4	33	22.9	10.2	ULS-3.3/30-D48	ULS-100W				
	45.5A	150W	48V	36V	75V	2.25kV	92%													2.3	0.9	0.4	58.4	22.9	10.2	UEE-3.3/45-D48	UEE 150W						
	50A	165W					90%																2.3	1.45	0.4	58.4	36.8	10.2	HPQ-3.3/50-D48N-C	HPQ			
5V	0.05A	0.25W	3.3V	2.97V	3.63V	1kV	70%													0.24	0.45	0.39	6	11.5	10	LME0305SC	LME						
				5V	4.5V	5.5V	1kV	70%														0.39	0.45	0.27	9.8	11.5		6.8	LME0505DC				
				12V	10.8V	13.2V	1kV	70%														0.24	0.45	0.39	6	11.5		10	LME0505SC				
		0.1A	0.5W	5V	4.75V	5.25V	1kV	50%													0.39	0.77	0.27	9.8	19.5	6.8	NMF0505DC	NMF					
				12V	11.4V	12.6V	1kV	50%													0.24	0.77	0.39	6	19.5	10	NMF0505SC						
																						0.39	0.77	0.27	9.8	19.5	6.8		NMF1205DC				
				24V	22.8V	25.2V	1kV	50%														0.24	0.77	0.39	6	19.5	10		NMF1205SC				
		0.15A	0.75W	3.3V	2.97V	3.63V	3kV	73%													0.45	0.236	0.293	11.48	6	7.46	CME0305S3C	CME					
								1kV	70%													0.453	0.386	0.267	11.50	9.80	6.80		CME0505DC				
								3kV															0.45	0.236	0.393	11.48	6		10	CME0505SC			
						5V	4.5V	5.5V	1kV	69%													0.45	0.236	0.293	11.48	6	7.46	CME0505S3C				
									3kV	68%													0.77	0.236	0.394	19.50	6	10	CMR100C	CMR			
					24V	21.6V	26.4V	1kV	70%													0.77	0.236	0.394	19.50	6	10	CMR118C					
		0.2A	1W	3.3V	2.97V	3.63V	1kV	79%													0.39	0.45	0.27	9.8	11.5	6.8	MEE1S0305DC	MEE1					
																									0.24	0.45	0.39		6	11.5	10	MEE1S0305SC	
													79%													0.327	0.240	0.313	8.3	6.1	7.95	MEU1S0305ZC	MEU1
													82%													0.5	0.43	0.27	12.7	11	7.05	MTE1S0305MC	MTE1
													81%													0.323	0.331	0.335	8.2	8.4	8.5	MTU1S0305MC	MTU1
													78%													0.30	0.5	0.26	7.7	12.7	6.6	NTE0305MC	NTE
													3kV	76%													0.39	0.45	0.212	9.8	11.5	5.4	NKE0305DC
												5.2kV	71.5%													0.24	0.45	0.293	6	11.5	7.5	NKE0305SC	
									3.3V	3.14V	3.47V	1kV	71%													0.774	0.242	0.40	19.65	6.15	10.15	MEF1S0305SPC	MEF1
						3kV														0.774	0.242	0.40	19.65	6.15	10.15	MEF1S0305SP3C							
			5V	4.5V	5.5V	1kV	80%													0.39	0.45	0.27	9.8	11.5	6.8	MEE1S0505DC	MEE1						
																			0.24	0.45	0.39	6	11.5	10	MEE1S0505SC								



Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style								Package Dimensions						Further Information													
Rated Output Voltage	Rated Output Current	Total Output Power	Nom.	Min.	Max.			Bricks								Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet <i>Available at www.murata-ps.com</i>												
								1/32	1/16	1/8	1/4	1/2	SM	TH	DIP	SIP	L	W	H	L	W			H											
5V	0.2A	1W	24V	21.6V	26.4V	1kV	70%																		NME2405DC	NME2									
																															NME2405SC				
																																NMR118C	NMR		
						3kV	84%																					MEV1S2405DC	MEV1						
																												MEV1S2405SC							
								5.2kV	75%																					MEJ1S2405SC	MEJ1				
				24V	22.8V	25.2V	1kV	73%																			MEF1S2405SPC	MEF1							
									3kV																						MEF1S2405SP3C				
				48V	43.2V	52.8V	1kV	79.5%																			MER1S4805SC	MER1							
									3kV	84%																						MEV1S4805SC	MEV1		
		0.3A	1.5W	5V	4.5V	5.5V	8kV	75%																			PWR1300AC	PWR13XXC							
						12V		10.8V	13.2V	75%																					PWR1306AC				
		0.4A	2W	3.3V	2.97	3.63	1kV	79%																				MTU2S0305MC	MTU2						
										5.2kV	74%																						MEJ2S0305SC	MEJ2	
		0.4A	2W	5V	4.5V	5.5V	1kV	82%																				MTU2S0505MC	MTU2						
										81%																							NMG0505SC	NMG	
										78%																								NML0505SC	NML
										3kV	80%																							NMK0505SAC	NMK
										5.2kV	75%																							MEJ2S0505SC	MEJ2
										9V	1kV	66%																						NDL0505SC	NDL
						9V	18V	1kV	73%																						NDL1205SC	NDL			
									85%																								MTU2S1205MC	MTU2	
						12V	10.8V	13.2V	1kV	81%																					NMG1205SC	NMG			
										81%																								NML1205SC	NML
					3kV					80%																							NMK1205SAC	NMK	
					5.2kV					78%																							MEJ2S1205SC	MEJ2	
			15V	13.5V	16.5V	3kV	84%																					NMK1505SAC	NMK						
							5.2kV	76%																							MEJ2S1505SC	MEJ2			
			24V	18V	36V	1kV	74%																				NDL2405SC	NDL							
			24V	21.6V	26.4V	1kV	80%																					MTU2S2405MC	MTU2						
							3kV	84%																							NMK2405SAC	NMK			
			48V	36V	72V	1kV	73%																				NDL4805SC	NDL							
	0.6A	3W	5V	4.5V	5.5V	1kV	83%																					MEE3S0505SC	MEE3						
									3kV	83%																							MEV3S0505SC	MEV3	
									9V	18V	1kV	71%																						NDTS0505C	NDTS
												66%																							
									12V	9V	18V	1kV	73%																					NDTS1205C	NDTS
													71%																						
					12V	10.8	13.2	3kV	85%																					MEE3S1205SC	MEE3				
									84%																								MEV3S1205SC	MEV3	
					24V	18V	36V	1kV	78%																					NDTS2405C	NDTS				
									70%																								NDY2405C	NDY	
					48V	36V	72V	1kV	75%																					NDTS4805C	NDTS				
									73%																								NDY4805C	NDY	
	1.2A	6W	12V	9V	36V	1.5kV	82%																					NCS6S1205C	NCS6						
					24V		18V	36V	82%																					NDS6S2405C	NDS6				
					48V		18V	75V	80%																					NCS6S4805C	NCS6				
					5V	4.5V	9V	5.2kV	80%																					NCM6S0505C	NCM6				
					12V	9V	36V		82%																							NCM6S1205C			
					48V	18V	75V		78%																							NCM6S4805C			
	1.96A	10W	24V	18V	36V	1.5kV	83%																						NPH10S2405EIC	NPH10S					
																																		NPH10S2405IC	
																																			NPH10S4805EIC
			48V	36V	75V	1.5kV	83%																						NPH10S4805IC						
																																NPH10S4805EIC			
	2.4A	12W	12V	9V	36V	1.5kV	88%																						NCS12S1205C	NCS12					
					48V		18V	75V	87.5%																							NCS12S4805C			

## Single output isolated

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style								Package Dimensions						Further Information						
Rated Output Voltage	Rated Output Current	Total Output Power	Nom.	Min.	Max.			Bricks								Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet Available at <a href="http://www.murata-ps.com">www.murata-ps.com</a>					
								1/32	1/16	1/8	1/4	1/2	SM	TH	DIP	SIP	L	W	H	L	W			H				
<b>5V</b>	3A	15W	24V	9V	36V	1.5kV	87%											1.1	0.96	0.36	27.9	24.4	9.1	UEI15-050-Q12P-C	UEI 15W			
						1.6kV	88%														1	1	0.41	25.4	25.4	10.4	SPM15-050-Q12	SPM15
			24V	18V	36V	1.5kV	84%													0.98	1.97	0.39	25	50	10	NPH15S2405EIC	NPH15S	
																							0.98	1.97	0.39	25		50
			48V	18V	75V	2.25kV	86%													1.1	0.96	0.36	27.9	24.4	9.1	UEI15-050-Q48N-C	UEI15W	
								36V	75V	1.5kV	85%												0.98	1.97	0.39	25	50	10
																					0.98	1.97	0.39	25	50	10	NPH15S4805IC	
	N/A	16V	160V	4kV	78%													2	2	0.79	50.8	50.8	20	RUW15SL05C	RUW15			
						77%															2	2	0.79	50.8		50.8	20	RUW15SL05HC
	5A	25W	24V	9V	36V		1.5kV	87.5%											2	1.6	0.4	50.8	40.6	10.2	UHE-5/5000-Q12-C	UHE12-30W		
						18V			75V	1.5kV	90%											2	1.6	0.4	50.8		40.6	10.2
			48V	36V	75V		1.6kV	91%														1	1	0.41	25.4	25.4	10.4	SPM25-050-D48
						1.5kV			89%												0.92	0.75	0.35	23.4	19.1	8.9	ULT-5/5-D48	ULT
										2.25kV	91%												1.1	0.32	0.96	27.9	8.13	24.4
						1.5kV			91.5%														2	1.6	0.4	50.8	40.6	10.2
	24V	9V	36V	2.25kV	89.5%													1.92	0.35	0.92	48.8	8.9	23.4	UEI30-050-Q12P-C	UEI30			
						36V	75V	1.5kV	91.5%											2	1.6	0.4	50.8	40.6	10.2	UHE-5/6000-D48-C	UHE12-30W	
	48V	18V	75V	1.5kV	91.5%														2	1.6	0.4	50.8	40.6	10.2	UHE-5/6000-Q48-C			
																					1.92	0.35	0.92	48.8	8.9	23.4	UEI30-050-Q48N-C	UEI30
	10A	50W	24V	9V	36V	1.5kV	90%										1.95	1.55	0.375	49.5	39.4	9.5	UEI-5/10-Q12PR-C	UEI50/60				
								48V	18V	75V	2.25kV	91%										0.91	1.31	0.36	23.1	33.27	9.14	UWS-5/10-Q48
	12A	60W	24V	18V	36V	2kV	90%														2.3	0.9	0.41	58.4	22.9	10.4	ULE-5/12-D24P-C	ULE20A
								48V	18V	75V	2.25kV	91%									1.95	1.55	0.375	49.5	39.4	9.5	UEI-5/12-Q48NR-C	UEI50/60
			48V	36V	75V	2.25kV	90%														2.3	0.9	0.41	58.4	22.9	10.4	ULE-5/12-D48N-C	ULE20A
																			1.3	0.4	0.9	33.02	10.16	22.86	ULS-5/12-D48N-C	ULS		
15A	75W	12V	9V	36V	2.25kV	91%									2.3	0.38	0.9	58.4	9.7	22.9	UWE-5/15-Q12P-C	UWE						
							48V	18V	75V	90%									2.3	0.38	0.9	58.4	9.7	22.9	UWE-5/15-Q48N-C	UWE		
17A	85W	12V	9V	36V	2kV	90.5%												2.22	1.45	0.43	56.4	36.8	10.9	UQQ-5/17-Q12P-C	UQQ7-15A			
																				2.22	1.45	0.43	56.4	36.8		10.9	UQQ-5/20-Q48N-C	
20A	100W	48V	18V	75V	2.25kV	91%									2.3	0.9	0.39	58.4	22.9	9.9	UWE-5/20-Q48-C	UWE-100-120W						
							36V	75V	2.25kV	91%									1.3	0.9	0.4	33	22.9	10.2	ULS-5/20-D48	ULS-100W		
		89%																2.3	0.9	0.39	58.4	22.9	9.9	UWE-5/20-Q48-C	UWE-100-120W			
			89%													2.3	1.45	0.42	58.4	36.8	10.7	UVQ-5/20-D48N-C	UVQ					
30A	150W	48V		36V	75V	2.25kV	92%								2.3	0.9	0.4	58.4	22.9	10.2	UEE-5/30-D48	UEE 150W						
																				2.3	0.9	0.4	58.4	22.9	10.2	UEE-5/30-D48		
<b>6V</b>	0.167A	1W	5V	4.5V	5.5V	1kV	84%									0.5	0.43	0.27	12.7	11	7.05	MTE1S0506MC	MTE1					
							72%												0.30	0.5	0.26	7.7	12.7	6.6	NTE0506MC	NTE		
<b>8.3V</b>	22A	182.6W	48V	36V	75V	2.25kV	92.5%								2.3	0.4	1.45	58.4	10.2	36.8	HPQ-8.3/22-D48	HPQ						
<b>9V</b>	0.028A	0.25W	5V	4.5V	5.5V	1kV	75%									0.39	0.45	0.27	9.8	11.5	6.8	LME0509DC	LME					
																				0.24	0.45	0.39		6	11.5	10	LME0509SC	
	12V	10.8V	13.2V	1kV	75%										0.39	0.45	0.27	9.8	11.5	6.8	LME1209DC	LME						
																		0.24	0.45	0.39	6		11.5	10	LME1209SC			
	0.1A	0.9W	24V	22.8V	25.2V	1kV	62%									0.39	0.77	0.27	9.8	19.5	6.8	NMF2409DC	NMF					
																				0.24	0.77	0.39		6	19.5	10	NMF2409SC	
	0.111A	1W	3.3V	2.97V	3.63V	1kV	79%									0.39	0.45	0.27	9.8	11.5	6.8	MEE1S0309DC	MEE1					
																			0.24	0.45	0.39	6		11.5	10	MEE1S0309SC		
								79%													0.327	0.240	0.313	8.3	6.1	7.95	MEU1S0309ZC	MEU1
									85%													0.5	0.43	0.27	12.7	11	7.05	MTE1S0309MC
								77%														0.30	0.5	0.26	7.7	12.7	6.6	NTE0309MC
									3kV	75%												0.39	0.45	0.21	9.8	11.5	5.4	NKE0309DC
																	0.24	0.45	0.29	6	11.5	7.5	NKE0309SC					
			5V	4.5V	5.5V	1kV	80%										0.39	0.45	0.27	9.8	11.5	6.8	MEE1S0509DC	MEE1				
																			0.24	0.45	0.39	6	11.5		10	MEE1S0509SC		
								87%													0.24	0.45	0.39	6	19.5	10	MER1S0509SC	MER1
									81%												0.327	0.240	0.313	8.3	6.1	7.95	MEU1S0509ZC	MEU1
								85%														0.5	0.43	0.27	12.7	11	7.05	MTE1S0509MC
86%																			0.323	0.331	0.335	8.2	8.4	8.5	MTU1S0509MC	MTU1		
	1kV	77%												0.39	0.45	0.27	9.8	11.5	6.8	NME0509DC	NME							
														0.24	0.45	0.39	6	11.5	10	NME0509SC								
1kV	75%													0.30	0.5	0.26	7.7	12.7	6.6	NTE0509MC	NTE							



## Single output isolated

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style							Package Dimensions						Further Information																	
Rated Output Voltage	Rated Output Current	Total Output Power	Nom.	Min.	Max.			Bricks							Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet <i>Available at www.murata-ps.com</i>																
								1/32	1/16	1/8	1/4	1/2	SM	TH	DIP	SIP	L	W	H	L			W	H														
<b>9V</b>	0.333A	3W	5V	4.5V	5.5V	1kV	87%																	MEE3S0509SC	MEE3													
					3kV	87%																					MEV3S0509SC	MEV3										
					9V	1kV	72%																					NDY0509C	NDY									
			12V	9V	18V	1kV	78%																					NDY1209C	NDY									
						1kV	88%																						MEE3S1209SC	MEE3								
						3kV	87.5%																						MEV3S1209SC	MEV3								
			24V	18V	36V	1kV	78%																					NDY2409C	NDY									
						1kV	80%																							NDY4809C								
<b>12V</b>	0.021A	0.25W	5V	4.5V	5.5V	1kV	75%																			LME0512DC	LME											
						1kV	75%																							LME0512SC								
			12V	10.8V	13.2V	1kV	75%																						LME1212DC									
						1kV	75%																							LME1212SC								
	0.063A	0.75W	5	4.5	5.5	1kV	77%																				CME0512SC	CME										
						3kV	75%																							CME0512S3C								
	0.083A	1W	3.3V	2.97V	3.63V	1kV	81%																				MEE1S0312DC	MEE1										
							81%																								MEE1S0312SC							
							86%																									MEU1S0312ZC						
							77%																									MTE1S0312MC						
							77%																									NTE0312MC						
							77%																										NTE0312MC					
						5V	4.5V	5.5V	1kV	81%																							MEE1S0512DC	MEE1				
										87%																										MEE1S0512SC		
										83%																										MER1S0512SC	MER1	
										87%																										MEU1S0512ZC		
										87%																											MTE1S0512MC	MTE1
										87%																											MTU1S0512MC	
			5V	4.5V	5.5V	1kV	78%																						NME0512DC	NME								
							77%																									NME0512SC						
							77%																									NMR101C	NMR					
							77%																									NTE0512MC						
							87%																										MEV1S0512DC	MEV1				
							87%																										MEV1S0512SC					
			5V	4.5V	5.5V	3kV	87%																							NKE0512DC	NKE							
							77%																									NKE0512SC						
							77%																									NMV0512DAC	NMV					
							77%																									NMV0512SAC						
							74%																									MEJ1S0512SC	MEJ1					
							71%																									NMJ0512SAC						
			5V	4.75V	5.25V	1kV	62%																						NMF0512DC	NMF								
							62%																									NMF0512SC						
			12V	4.5V	18V	1kV	78%																						NCS1S1212SC	NCS1								
							78%																									MEE1S1212DC						
			12V	10.8V	13.2V	1kV	82%																							MEE1S1212SC	MEE1							
							88.5%																									MER1S1212SC						
							86%																										MEU1S1212ZC					
							88%																										MTE1S1212MC					
							88%																										MTU1S1212MC					
							76%																										NME1212DC	NME				
							76%																										NME1212SC					
							3kV	88%	88%	88%																								MEV1S1212DC	MEV1			
										88%																										MEV1S1212SC		
							1kV	76%	74%	76%																								NMR107C	NMR			
										74%																										NTE1212MC		
							3kV	79%	77%	79%																								NKE1212DC	NKE			
			77%																											NKE1212SC								
			3kV	79%	77%	79%																							NMV1212DAC	NMV								
77%																													NMV1212SAC									



# Single output isolated

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style								Package Dimensions						Further Information					
Rated Output Voltage	Rated Output Current	Total Output Power	Nom.	Min.	Max.			Bricks								Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet Available at <a href="http://www.murata-ps.com">www.murata-ps.com</a>				
								1/32	1/16	1/8	1/4	1/2	SM	TH	DIP	SIP	L	W	H	L	W			H			
12V	0.5A	6W	5V	4.5V	9V	5.2kV	82%											1.26	0.787	0.423	32	20	10.75	NCM6S0512C	NCM6		
			12V	9V	36V		86%												1.26	0.787	0.423	32	20	10.75		NCM6S1212C	
						1.5kV	84%												1.26	0.79	0.39	32	20	10		NCS6S1212C	NCS6
			24V	18V	36V	1.5kV	87%												1.26	0.79	0.39	32	20	10		NDS6S2412C	NDS6
						5.2kV	82%													1.26	0.787	0.423	32	20		10.75	NCM6S4812C
				1.5kV	84%													1.26	0.79	0.39	32	20	10	NCS6S4812C	NCS6		
		0.83A	10W	24V	18V	36V	1.5kV	86%										0.98	1.26	0.39	25	32	10	NPH10S2412EIC	NPH10S		
							86%										0.98	1.26	0.39	25	32	10	NPH10S2412IC				
		1A	12W	12V	9V	36V	1.5kV	84.5%										1.26	0.787	0.394	32	20	10	NCS12S1212C	NCS12		
						48V		18V	75V	84.5%										1.26	0.787	0.394	32	20		10	NCS12S4812C
		1.25A	15W	24V	18V	36V	1.5kV	86%										0.98	1.97	0.39	25	50	10	NPH15S2412EIC	NPH15S		
									86%										0.98	1.97	0.39	25	50	10		NPH15S2412IC	
						48V	36V	75V	1.5kV	88%										0.98	1.97	0.39	25	50	10	NPH15S4812EIC	NPH15S
										88%										0.98	1.97	0.39	25	50	10	NPH15S4812IC	
				N/A	16V	160V	4kV	78%										2	2	0.79	50.8	50.8	20	RUW15SL12C	RUW15		
								77%										2	2	0.79	50.8	50.8	20	RUW15SL12HC			
		1.3A	15.6W	24V	9V	36V	1.6kV											1	1	0.41	25.4	25.4	10.4	SPM15-120-Q12	SPM15		
						2.25kV	84.5%												0.96	0.32	1.1	24.4	8.1	27.9	UEI15-120-Q12	UEI15	
						48V	18V	75V	1.6kV											1	1	0.41	25.4	25.4	10.4	SPM15-120-Q48	SPM15
							2.25kV	85%										0.96	0.32	1.1	24.4	8.1	27.9	UEI15-120-Q48	UEI15		
		2.10A	25.2W	48V	36V	75V	1.6kV	87%										1	1	0.41	25.4	25.4	10.4	SPM25-120-D48	SPM25		
						2.25kV	87.5%												1.1	0.32	0.96	27.9	8.13	24.4	UEI25-120-D48	UEI25	
									2.25kV	87.5%										1.1	0.32	0.96	27.9	8.13	24.4	UEI25-120-D48	UEI25
		2.5A	30W	12V	9V	18V	1.5kV	89%										2	1.6	0.4	50.8	40.6	10.2	UHE-12/2500-D12-C	UHE 12-30W		
						9V		36V	87.5%											2	1.6	0.4	50.8	40.6		10.2	UHE-12/2500-Q12-C
						18V		36V	90%											2	1.6	0.4	50.8	40.6		10.2	UHE-12/2500-D24-C
						9V	36V	2.25kV	89%											1.92	0.35	0.92	48.8	8.9	23.4	UEI30-120-Q12P-C	UEI30
						18V	75V	1.5kV	90.5%											2	1.6	0.4	50.8	40.6	10.2	UHE-12/2500-Q48-C	UHE 12-30W
						36V	75V	1.5kV	92%											2	1.6	0.4	50.8	40.6	10.2	UHE-12/2500-D48-C	
						48V	18V	75V	2.25kV	89%										1.92	0.35	0.92	48.8	8.9	23.4	UEI30-120-Q48N-C	UEI30
						1.5kV	91%										0.92	0.75	0.35	23.4	19.1	8.9	ULT-12/2.5-D48	ULT			
						2.25kV	87.7%										0.9	1.3	0.36	22.9	33.02	9.14	ULS-12/2.5-D48	ULS-30W			
	4.2A	50.4W	24V	9V	36V	2.25kV	89.5%										1.95	1.55	0.375	49.5	39.4	9.5	UEI-12/4.2-Q12P-C	UEI-50/60			
					18V	36V	2kV	91%										2.3	0.9	0.41	58.4	22.9	10.4	ULE-12/4.2-D24P-C	ULE 20A		
						2.25kV	92%										2.3	0.9	0.41	58.4	22.9	10.4	ULE-12/4.2-D48N-C	ULE 20A			
	4.5A	54W	48V	18V	75V	2.25kV	91%										0.91	1.31	0.36	23.1	33.27	9.14	UWS-12/4.5-Q48	UWS			
	5A	60W					89.8%										1.95	1.55	0.375	49.5	39.4	9.5	UEI-12/5-Q48N-C	UEI-50/60			
					36V	75V	2.25kV	91%										1.3	0.4	0.9	33.02	10.16	22.86	ULS-12/5-D48N-C	ULS		
	6A	72W	12V	9V	36V	2.25kV	91.5%										2.3	0.38	0.9	58.4	9.7	22.9	UWE-12/6-Q12P-C	UWE			
					48V		18V	75V	91%										2.3	0.38	0.9	58.4	9.7		22.9	UWE-12/6-Q48N-C	
	8A	96W	12V	9V	36V	2kV	89%										2.22	1.45	0.43	56.4	36.8	10.9	UQQ-12/8-Q12P-C	UQQ7-15A			
					18V		75V	2.25kV	88.5%										2.22	1.45	0.43	56.4	36.8	10.9	UQQ-12/8-Q48N-C	UQQ7-15A	
					36V	75V	2.25kV	92%											1.3	0.9	0.4	33	22.9	10.2	ULS-12/8.3-D48	ULS-100W	
	8.3A	99.6W	18V	75V	2.25kV	91.5%											2.3	0.9	0.39	58.4	22.9	9.9	UWE-12/10-Q48-C	UWE-100-120W			
	10A	120W	36V	75V	2.25kV	93%											2.3	1.45	0.42	58.4	36.8	10.7	UVQ-12/10-D48N-C	UVQ			
							93%											2.3	0.9	0.4	58.4	22.9	10.2	UEE-12/12.5-D48	UEE 150W		
	12.5A	150W	48V	18V	75V	2.25kV	92%										2.3	1.45	0.46	58.4	36.8	11.7	UWQ-12/17-Q48	UWQ			
	17A	204W					94.5%										2.3	0.9	0.4	58.4	22.9	10.2	RBE-12/20-D48	RBE			
	20A	234W					93.5%										2.3	1.45	0.44	58.4	36.8	11.2	HPQ-12/25-D48	HPQ			
	25A	300W					96%										2.3	1.45	0.5	58.4	36.8	12.7	RBQ-12/33-D48	RBQ			
	33A	391W															2.3	1.45	0.5	58.4	36.8	12.7	RBQ-12/33-D48	RBQ			
15V	0.016A	0.25W	5V	4.5V	5.5V	1kV	75%										0.39	0.45	0.27	9.8	11.5	6.8	LME0515DC	LME			
			12V	10.8V	13.2V	1kV	75%											0.39	0.45	0.27	9.8	11.5	6.8		LME1215DC		
																	0.39	0.45	0.27	9.8	11.5	6.8	LME1215SC				
		0.067A	1W	3.3V	2.97V	3.63V	1kV	82%										0.39	0.45	0.27	9.8	11.5	6.8	MEE1S0315DC	MEE1		
								81%										0.327	0.240	0.313	8.3	6.1	7.95	MEU1S0315ZC			

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style								Package Dimensions						Further Information									
Rated Output Voltage	Rated Output Current	Total Output Power	Nom.	Min.	Max.			Bricks								Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet <i>Available at www.murata-ps.com</i>								
								1/32	1/16	1/8	1/4	1/2	SM	TH	DIP	SIP	L	W	H	L	W			H							
15V	0.067A	1W	3.3V	2.97V	3.63V	1kV	86%												0.5	0.43	0.27	12.7	11	7.05	MTE1S0315MC	MTE1					
							77%																0.30	0.5	0.26	7.7	12.7	6.6	NTE0315MC	NTE	
			5V	4.5V	5.5V	1kV	83%															0.39	0.45	0.27	9.8	11.5	6.8	MEE1S0515DC	MEE1		
																								0.24	0.45	0.39	6	11.5		10	MEE1S0515SC
							87.5%																	0.24	0.77	0.39	6	19.5	10	MER1S0515SC	MER1
							83%																	0.327	0.240	0.313	8.3	6.1	7.95	MEU1S0515ZC	MEU1
							88%																	0.5	0.43	0.27	12.7	11	7.05	MTE1S0515MC	MTE1
							87%																	0.323	0.331	0.335	8.2	8.4	8.5	MTU1S0515MC	MTU1
							80%																	0.39	0.45	0.28	9.8	11.5	6.8	NME0515DC	NME
																							0.24	0.45	0.39	6	11.48	10	NME0515SC		
						79%																	0.24	0.77	0.39	6	19.5	10	NMR102C	NMR	
						78%																	0.30	0.5	0.26	7.7	12.7	6.6	NTE0515MC	NTE	
						3kV	87.5%																0.39	0.77	0.27	9.8	19.5	6.8	MEV1S0515DC	MEV1	
																							0.24	0.77	0.39	6	19.5	10	MEV1S0515SC		
							78%																0.39	0.45	0.21	9.8	11.5	5.4	NKE0515DC	NKE	
																							0.236	0.45	0.29	6	11.48	7.5	NKE0515SC		
			78%																	0.39	0.77	0.26	9.8	19.5	6.8	NMV0515DAC	NMV				
																			0.24	0.77	0.39	6	19.5	10	NMV0515SAC						
			5.2kV	75%																0.77	0.390	0.50	19.5	9.95	12.65	MEJ1S0515SC	MEJ1				
				71%																0.39	0.77	0.49	9.8	19.5	12.5	NMJ0515SAC	NMJ				
			4.75V	5.25V	1kV	62%														0.39	0.77	0.27	9.8	19.5	6.8	NMF0515DC	NMF				
																					0.24	0.77	0.39	6	19.5	10		NMF0515SC			
			12V	10.8V	13.2V	1kV	81%													0.39	0.45	0.27	9.8	11.5	6.8	MEE1S1215DC	MEE1				
																						0.24	0.45	0.39	6	11.5		10	MEE1S1215SC		
							88%															0.24	0.77	0.39	6	19.5	10	MER1S1215SC	MER1		
							87%															0.327	0.240	0.313	8.3	6.1	7.95	MEU1S1215ZC	MEU1		
							88%															0.5	0.43	0.27	12.7	11	7.05	MTE1S1215MC	MTE1		
							88%															0.323	0.331	0.335	8.2	8.4	8.5	MTU1S1215MC	MTU1		
							75%															0.39	0.45	0.27	9.8	11.5	6.8	NME1215DC	NME		
						75%															0.24	0.45	0.39	6	11.5	10	NME1215SC				
						76%															0.24	0.77	0.39	6	19.5	10	NMR108C	NMR			
						75%															0.30	0.5	0.26	7.7	12.7	6.6	NTE1215MC	NTE			
						3kV	88%															0.39	0.77	0.27	9.8	19.5	6.8	MEV1S1215DC	MEV1		
																						0.24	0.77	0.39	6	19.5	10	MEV1S1215SC			
							81%															0.39	0.45	0.21	9.8	11.5	5.4	NKE1215DC	NKE		
							81%															0.24	0.45	0.29	6	11.48	7.46	NKE1215SC			
							77%															0.39	0.77	0.27	9.8	19.5	6.8	NMV1215DAC	NMV		
						77%															0.24	0.77	0.39	6	19.5	10	NMV1215SAC				
						5.2kV	77%															0.77	0.390	0.50	19.5	9.95	12.65	MEJ1S1215SC	MEJ1		
							74%															0.39	0.77	0.49	9.8	19.5	12.5	NMJ1215SAC	NMJ		
			11.4V	12.6V	1kV	62%													0.39	0.77	0.27	9.8	19.5	6.8	NMF1215DC	NMF					
																				0.24	0.77	0.39	6	19.5	10		NMF1215SC				
			15V	13.5V	16.5V	1kV	83%												0.39	0.45	0.27	9.8	11.5	6.8	MEE1S1515DC	MEE1					
																					0.24	0.45	0.39	6	11.5		10	MEE1S1515SC			
							89%														0.24	0.77	0.39	6	19.5	10	MER1S1515SC	MER1			
88%																		0.5	0.43	0.27	12.7	11	7.05	MTE1S1515MC	MTE1						
75%																		0.24	0.45	0.39	6	11.48	10	NME1515SC	NME						
76%																		0.24	0.77	0.39	6	19.5	10	NMR114C	NMR						
3kV	89%																	0.39	0.77	0.27	9.8	19.5	6.8	MEV1S1515DC	MEV1						
															0.24	0.77	0.39	6	19.5	10	MEV1S1515SC										
	77%														0.24	0.77	0.39	6	19.5	10	NMV1515SAC	NMV									
5.2kV	76.5%														0.77	0.390	0.50	19.5	9.95	12.65	MEJ1S1515SC	MEJ1									
24V	21.6V	26.4V	1kV	78%												0.39	0.45	0.27	9.8	11.5	6.8	MEE1S2415DC	MEE1								
																	0.24	0.45	0.39	6	11.5	10		MEE1S2415SC							
				87.5%														0.24	0.77	0.39	6	19.5	10	MER1S2415SC	MER1						
				88%														0.5	0.43	0.27	12.7	11	7.05	MTE1S2415MC	MTE1						
				80%														0.39	0.45	0.27	9.8	11.5	6.8	NME2415DC	NME2						
														0.24	0.45	0.39	6	11.5	10	NME2415SC											



Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style							Package Dimensions						Further Information								
Rated Output Voltage	Rated Output Current	Total Output Power	Nom.	Min.	Max.			Bricks							Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet Available at <a href="http://www.murata-ps.com">www.murata-ps.com</a>							
								1/32	1/16	1/8	1/4	1/2	SM	TH	DIP	SIP	L	W	H	L			W	H					
<b>15V</b>	3.3A	49.5W	24V	9V	36V	2.25kV	90%											1.95	1.55	0.375	49.5	39.4	9.5	UEI-15/3.3-Q12P-C	UEI-50/60				
	4A	60W	48V	18V	75		89.3%												1.95	1.55	0.375	49.5	39.4	9.5		UEI-15/4-Q48N-C			
	7A	105W	12V	9V	36V	2kV	91.5%												2.3	0.38	0.9	58.4	9.7	22.9	UWE-15/5-Q12P-C	UWE			
			24V	18V	36V	2kV	90.5%													2.22	1.45	0.43	56.4	36.8	10.9	UQQ-15/7-Q12P-C	UQQ7-15A		
			48V	36V	75V	2.25kV	93%													2.3	1.45	0.42	58.4	36.8	10.7	UVQ-15/7-D24P-C	UVQ		
						94%												2.3	1.45	0.42	58.4	36.8	10.7	UVQ-15/7-D48N-C					
<b>18V</b>	5.6A	100.8W	24V	18V	36V	2kV	90%												2.3	1.45	0.42	58.4	36.8	10.7	UVQ-18/5.6-D24P-C	UVQ			
	6A	108W	48V	36V	75V	2.25kV	93%												2.3	1.45	0.42	58.4	36.8	10.7	UVQ-18/6-D48N-C				
<b>24V</b>	0.042A	1W	5V	4.5V	5.5V	1kV	80%												0.39	0.45	0.27	9.8	11.5	6.8	NME0524DC	NME			
							80%																	0.24	0.45		0.39	6	11.5
	0.083A	2W	1kV	80%															0.77	0.236	0.394	19.5	6	10	MMV1S0524SC	MMV1			
				80%																	0.323	0.331	0.335	8.2	8.4	8.50	MTU2S0524MC	MTU2	
	0.625A	15W	N/A	16V	160V	4kV	78%												2	2	0.79	50.8	50.8	20	RUW15SL24C	RUW15			
							77%																	2	2		0.79	50.8	50.8
	3A	72W	12V	9V	36V	2.25kV	89.5%												2.3	0.38	0.9	58.4	9.7	22.9	UWE-24/3-Q12P-C	UWE			
			48V	36V	75V		94%														2.3	0.9	0.41	58.4	22.9	10.4	ULE-24/3-D48N-C	ULE20A	
	4A	96W	24V	18V	36V	2kV	89%												2.22	1.45	0.43	56.4	36.8	10.9	UQQ-24/4-Q12P-C	UQQ 7-15A			
			48V	36V	75V	2.25kV	94%													2.3	1.45	0.42	58.4	36.8	10.7	UVQ-24/4.5-D24P-C	UVQ		
4.5A	108W	24V	18V	36V	2kV	94%												2.3	1.45	0.42	58.4	36.8	10.7	UVQ-24/4.5-D48N-C					
		48V	36V	75V	2.25kV	94%													2.3	1.45	0.42	58.42	36.8	10.7	UVQ-24/4.5-D48N-C				
<b>28V</b>	12.5A	350W	48V	36V	75V	2.25kV	93%												2.3	2.4	0.5	58.4	60.9	12.7	PAH-28/12.5-D48	PAH-28V, 350W			
	16A	450W					93.5%															2.3	2.4	0.5	58.4	60.9	12.7	PAH-28/16-D48	PAH-28V, 450W
<b>29V</b>	5	150W	48V	36V	75V	2.25kV	92.5%												2.3	1.45	0.46	58.42	36.8	11.7	PAQ-29/5-D48-C	PAQ			
<b>29.8V</b>	3.3A	98.34W	48V	36V	75V	1.5kV	92.5%												2.3	0.9	0.44	58.4	22.9	11.1	PAE-29/3-D48	PAE			
<b>48V</b>	1.25A	60W	48V	36V	75V	2.25kV	92.5%												2.3	0.9	0.41	58.4	22.9	10.4	ULE-48/1.25-D48N-C	ULE20A			
	2.5A	120W					91.5%															2.3	1.45	0.42	58.4	36.8	10.7	UVQ-48/2.5-D48N-C	UVQ
	8.5A	408W					94%															2.3	2.4	0.5	58.4	60.9	12.7	PAH-48/8.5-D48	PAH-53V, 450W
<b>53V</b>	8.5A	450W	48V	36V	75V	2.25kV	94%												2.3	2.4	0.5	58.4	60.9	12.7	PAH-53/8.5-D48	PAH-53V, 450W			
<b>54V</b>	3A	162W	48V	18V	72V	2.25kV	91.5%												2.4	2.3	0.43	61.0	58.4	10.92	EMH-54/3-Q48N-C	EMH			
<b>96V</b>	0.10	9.600	48V	36V	75V	1.5kV	88%												2	1	0.4	50.8	25.4	10.2	UWR-96/100-D48A-C	UWR-96-100			

# Dual output

## Bipolar isolated DC-DC converters

For analog/linear and other applications requiring bipolar/symmetric rail voltages, Murata Power Solutions' isolated duals generate  $\pm 3.3V$ ,  $\pm 5V$ ,  $\pm 12V$  or  $\pm 15V$  outputs from a single input voltage. Not surprisingly, our offering is the industry's broadest.



We offer bipolar duals with output power ranges from 0.75 to 20 Watts, input voltage ranges from 3 to 75 Volts, and package styles from sub-miniature SIPs, DIPs and SMDs to traditional 2" x 2" (51 x 51mm) through-hole

devices. Isolation voltages run as high as 8,000Vdc. When relevant, all products offer UL/EN safety certifications, CE marks, and EMI/EMC testing.

If your available voltage is anywhere

between 3.3 and 75 Volts and your need is  $\pm 3.3V$ ,  $\pm 5V$ ,  $\pm 12V$  or  $\pm 15V$  at moderate power levels – in a small area – we've got your solution.

Quick selection guide listed by output power

	Vout					Series
	$\pm 3.3V$	$\pm 5V$	$\pm 9V$	$\pm 12V$	$\pm 15V$	
<1W						CMR
1W						MEA1
						MEJ1
						MEV1
						MTU1
						NKA
						NMA
						NMJ
						NMV
						NTA
						NTV
1.5W						PWR13XXC
						PWR1726AC

	Vout					Series
	$\pm 3.3V$	$\pm 5V$	$\pm 9V$	$\pm 12V$	$\pm 15V$	
2W						MEJ2
						MTU2
						NMH
						NMK
						NMS
						NTH
3W						NDH
						NDTD
						PWR70C

	Vout					Series
	$\pm 3.3V$	$\pm 5V$	$\pm 9V$	$\pm 12V$	$\pm 15V$	
5W						PWR1546AC
6W						NCM6
						NCS6
						NDS6
12W						NCS12
15W						BEI

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style							Package Dimensions						Further Information						
Rated Output Voltages	Rated Output Currents	Total Output Power	Nom.	Min.	Max.			Bricks							Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet Available at <a href="http://www.murata-ps.com">www.murata-ps.com</a>					
								1/8	1/4	1/2	SM	TH	DIP	SIP	L	W	H	L	W	H							
<b><math>\pm 3.3V</math></b>	$\pm 0.152A$	1W	3.3V	2.97V	3.63V	1kV	75%										0.3	0.6	0.26	7.7	15.2	6.6	NTA0303MC	NTA			
						3kV	74%													0.39	0.77	0.21	9.8	19.5	5.4	NKA0303DC	NKA
			5V	4.5V	5.5V	1kV	77%												0.23	0.65	0.3	6.0	16.6	7.6	NKA0303SC	NKA	
						3kV	77%													0.3	0.6	0.26	7.7	15.2	6.6	NTA0503MC	NTA
			12	10.8V	13.2V	5.2kV	70%												0.77	0.390	0.50	19.5	9.95	12.65	MEJ1D0503SC	MEJ1	
						5.2kV	73%													0.77	0.390	0.50	19.5	9.95	12.65	MEJ1D1203SC	MEJ1
	$\pm 0.303A$	2W	5V	4.5V	5.5V	5.2kV	71%											0.5	0.77	0.39	12.7	19.7	10.0	MEJ2D0503SC	MEJ2		
						5.2kV	75%													0.5	0.77	0.39	12.7	19.7	10.0	MEJ2D1203SC	MEJ2
						1kV	67%														0.58	1.27	0.27	14.7	32.3	7.0	NDTD0503C
		1kV	73%														0.58	1.27	0.27	14.7	32.3	7.0	NDTD1203C				
		1kV	73%														0.58	1.27	0.27	14.7	32.3	7.0	NDTD2403C				
		1kV	72%															0.58	1.27	0.27	14.7	32.3	7.0	NDTD4803C			
<b><math>\pm 5V</math></b>	$\pm 0.1A$	1W	3.3V	2.97V	3.63V	1kV	83%										0.323	0.331	0.335	8.2	8.4	8.5	MTU1D0305MC	MTU1			
						1kV	78%													0.30	0.60	0.26	7.7	15.2	6.6	NTA0305MC	NTA
						3kV	79%													0.39	0.77	0.21	9.8	19.5	5.4	NKA0305DC	NKA
3kV	79%													0.23	0.65	0.30	6.0	16.6	7.6	NKA0305SC							

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style						Package Dimensions						Further Information																								
Rated Output Voltages	Rated Output Currents	Total Output Power	Nom.	Min.	Max.			Bricks						Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet <i>Available at www.murata-ps.com</i>																							
								1/8	1/4	1/2	SM	TH	DIP	SIP	L	W	H	L	W			H																						
<b>±5V</b>	±0.1A	1W	5V	4.5V	5.5V	1kV	85%								0.39	0.77	0.27	9.8	19.5	6.8	MEA1D0505DC	MEA1																						
																										MEA1D0505SC																		
							84%													0.323	0.331	0.335	8.2	8.4	8.5	MTU1D0505MC	MTU1																	
							69%																					NMA0505DC	NMA															
																												NMA0505SC																
						69%																							NTA0505MC	NTA														
						80%																							NTA0505MEC															
						85%																								MEV1D0505DC	MEV1													
																														MEV1D0505SC														
						70%																									NKA0505DC	NKA												
						80%																									NKA0505DEC													
						70%																									NKA0505SC													
			80%																									NKA0505SEC																
			71.5%																									NMV0505DC	NMV															
																												NMV0505SC																
			71%																										NTV0505MC	NTV														
			72%																										MEJ1D0505SC	MEJ1														
			60%																										NMJ0505SC	NMJ														
			12V	10.8V	13.2V	1kV	85%																							MTU1D1205MC	MTU1													
							84.5%																											MEA1D1205DC	MEA1									
							85%																													MEA1D1205SC								
							69%																													NMA1205DC	NMA							
						69%																														NMA1205SC								
						85%																															MEV1D1205DC	MEV1						
																																					MEV1D1205SC							
						74%																																NKA1205DC	NKA					
						71%																																NKA1205SC						
						71%																																	NMV1205DC	NMV				
						73%																																	NTV1205MC					
						75.5%																																	MEJ1D1205SC	MEJ1				
			60%																																	NMJ1205SC	NMJ							
			15V	13.5V	16.5V	1kV	84%																															MEA1D1505DC	MEA1					
																																									MEA1D1505SC			
						71%																																		NMA1505DC	NMA			
																																										NMA1505SC		
						84.5%																																		MEV1D1505DC	MEV1			
						69																																		MEV1D1505SC				
						75%																																			MEJ1D1505SC	MEJ1		
						24V	21.6V	26.4V	1kV	84.5																																MEA1D2405DC	MEA1	
																																								MEA1D2405SC				
	3kV	84%																																				MEV1D2405DC	MEV1					
	5.2kV	76.5%																																						MEV1D2405SC				
	1kV	80%																																		MEJ1D2405SC	MEJ1							
	3kV	80																																		MEA1D4805SC	MEA1							
																																				MEV1D4805SC	MEV1							
	±0.15A	1.5W	5V	4.5V	5.5V	8kV	75%																														PWR1303AC	PWR13XXC						
			12V	10V	13.2V	8kV	75%																														PWR1309AC							
	±0.2A	2W	5V	4.5V	5.5V	1kV	82%																																MTU2D0505MC	MTU2				
							80%																																			NMH0505DC	NMH	
																																												NMH0505SC
						1kV	80%																																				NTH0505MC	NTH
						3kV	83%																																				NMK0505SC	NMK
						5.2kV	76%																																				MEJ2D0505SC	MEJ2
			6kV	74%																																				NMS0505C	NMS			
			12V	10.8V	13.2V	1kV	80%																																			NMH1205DC	NMH	
							80%																																			NMH1205SC		
						1kV	80%																																			NTH1205MC	NTH	

## Dual output bipolar

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style						Package Dimensions						Further Information							
Rated Output Voltages	Rated Output Currents	Total Output Power	Nom.	Min.	Max.			Bricks		SM	TH	DIP	SIP	Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet <i>Available at www.murata-ps.com</i>						
								1/8	1/4					1/2	L	W	H	L	W			H					
<b>±5V</b>	±0.2A	2W	12V	10.8V	13.2V	3kV	84%					•	•	0.30	0.77	0.4	7.5	19.5	10	NMK1205SC	NMK						
						5.2kV	79%							•	•	0.5	0.77	0.39	12.7	19.7	10.0	MEJ2D1205SC	MEJ2				
						6kV	78%								•	•	0.58	1.28	0.37	14.7	32.6	9.4	NMS1205C	NMS			
			15V	13.5V	16.5V	3kV	84%							•	•	0.30	0.77	0.4	7.5	19.5	10	NMK1505SC	NMK				
						5.2kV	78%								•	•	0.5	0.77	0.39	12.7	19.7	10.0	MEJ2D1505SC	MEJ2			
						1kV	81%								•	•	0.39	0.77	0.30	9.8	19.5	7.7	NMH2405DC	NMH			
			24V	21.6V	26.4V	3kV	84%							•	•	0.30	0.77	0.40	7.5	19.5	10.0	NMH2405SC	NMH				
						1kV	82%								•	•	0.39	0.77	0.303	9.8	19.5	7.7	NMH4805DC	NMH			
			48V	43.2V	52.8V	1kV	82%							•	•	0.3	0.77	0.4	7.5	19.5	10.0	NMH4805SC	NMH				
						1kV	82%								•	•	0.39	0.77	0.303	9.8	19.5	7.7	NMH4805DC	NMH			
	±0.3A	3W	12V	9V	18V	18V	1kV	75%					•	•	0.58	1.27	0.27	14.7	32.3	7	NDTD1205C	NDTD					
							1kV	78%								•	•	0.58	1.27	0.27	14.7		32.3	7	NDTD2405C		
							1kV	76%									•	•	0.58	1.27	0.27		14.7	32.3	7	NDTD4805C	
	±0.6A	6W	5V	4.5V	9V	36V	5.2kV	80%					•		1.26	0.787	0.423	32	20	10.75	NCM6D0505C	NCM6					
							5.2kV	83%								•		1.26	0.787	0.423	32		20	10.75	NCM6D1205C		
			12V	9V	36V	1.5kV	82%							•	•	1.26	0.79	0.39	32	20	10	NCS6D1205C	NCS6				
						1.5kV	83%								•	•	1.26	0.79	0.39	32	20	10	NDS6D2405C	NDS6			
			24V	18V	36V	5.2kV	80%							•	•	1.26	0.787	0.423	32	20	10.75	NCM6D4805C	NCM6				
						5kV	80%								•	•	1.26	0.79	0.39	32	20	10	NCS6D4805C	NCS6			
	±1.2A	12W	12V	9V	36V	75V	1.5kV	81.5%					•		1.26	0.787	0.394	32	20	10	NCS12D1205C	NCS12					
							1.5kV	80%								•		1.26	0.787	0.394	32		20	10	NCS12D4805C		
	±1.5A	15W	24V	9V	36V	75V	2.25kV	84%					•		1.1	0.35	0.96	27.9	8.9	24.4	BEI15-050-Q12	BEI15-Series					
							2.25kV	83.5%								•		1.1	0.35	0.96	27.9		8.9	24.4	BEI15-050-Q48		
	<b>±9V</b>	±0.055A	1W	3.3V	2.97V	3.63V	3kV	75%					•	•	0.39	0.77	0.21	9.8	19.5	5.4	NKA0309DC	NKA					
75%																•	•	0.23	0.65	0.3	6		16.6	7.6	NKA0309SC		
75%																•		0.3	0.6	0.26	7.7		15.2	6.6	NTA0309MC	NTA	
5V				4.5V	5.5V	1kV	86.7								•	•	0.39	0.77	0.27	9.8	19.5	6.8	MEA1D0509DC	MEA1			
							86.5									•	•	0.24	0.77	0.39	6.0	19.5	10.0		MEA1D0509SC		
							75%									•	•	0.39	0.77	0.27	9.8	19.5	6.8		NMA0509DC	NMA	
							75%									•	•	0.24	0.77	0.39	6	19.5	10		NMA0509SC		
							75%									•		0.3	0.6	0.26	7.7	15.2	6.6		NTA0509MC	NTA	
						3kV	76%										•	•	0.39	0.77	0.21	9.8	19.5	5.4	NKA0509DC	NKA	
							76%										•	•	0.23	0.65	0.3	6	16.6	7.6	NKA0509SC		
							76%										•	•	0.39	0.77	0.27	9.8	19.5	6.8	NMV0509DC		NMV
							76%									•	•	0.24	0.77	0.39	6	19.5	10	NMV0509SC			
							77%										•		0.3	0.6	0.26	7.7	15.2	6.6	NTV0509MC		
5.2kV				74%										•		0.77	0.390	0.50	19.5	9.95	12.65	MEJ1D0509SC	MEJ1				
				65%										•	•	0.39	0.77	0.49	9.8	19.5	12.5	NMJ0509SC	NMJ				
12V				10.8V	13.2V	1kV	86.5								•	•	0.39	0.77	0.27	9.8	19.5	6.8	MEA1D1209DC	MEA1			
							74%									•	•	0.24	0.77	0.39	6.0	19.5	10.0		MEA1D1209SC		
						3kV	79%										•	•	0.39	0.77	0.21	9.8	19.5	5.4	NKA1209DC	NKA	
							77%										•	•	0.23	0.65	0.30	6	16.6	7.6	NKA1209SC		
							65%										•		0.77	0.390	0.50	19.5	9.95	12.65	MEJ1D1209SC		MEJ1
						5.2kV	77%										•	•	0.39	0.77	0.49	9.8	19.5	12.5	NMJ1209SC	NMJ	
							74%										•		0.3	0.6	0.26	7.7	15.2	6.6	NTA1209MC	NTA	
74%														•	•	0.39	0.77	0.27	9.8	19.5	6.8	NMV1209DC	NMV				
74%													•	•	0.24	0.77	0.39	6	19.5	10	NMV1209SC						
79%													•		0.3	0.6	0.26	7.7	15.2	6.6	NTV1209MC	NTV					
15V				13.5V	16.5V	1kV	87%								•	•	0.39	0.77	0.27	9.8	19.5	6.8	MEA1D1509DC	MEA1			
						5.2kV	76.5%									•	•	0.24	0.77	0.39	6.0	19.5	10.0		MEA1D1509SC		
						5.2kV	76.5%									•	•	0.77	0.390	0.50	19.5	9.95	12.65		MEJ1D1509SC	MEJ1	
24V				21.6V	26.4V	1kV	87%								•	•	0.39	0.77	0.27	9.8	19.5	6.8	MEA1D2409DC	MEA1			
						5.2kV	87.5%									•	•	0.24	0.77	0.39	6.0	19.5	10.0		MEA1D2409SC		
						5.2kV	78%									•	•	0.77	0.390	0.50	19.5	9.95	12.65		MEJ1D2409SC	MEJ1	
48V				43.2V	52.8V	1kV	82%							•	•	0.24	0.77	0.39	6.0	19.5	10.0	MEA1D4809SC	MEA1				
±0.056A				5	4.5	5.5	1kV	86%							•	•	0.323	0.331	0.335	8.2	8.4	8.5	MTU1D0509MC	MTU1			
							3kV	87%								•	•	0.39	0.77	0.27	9.8	19.5	6.8	MEV1D0509DC	MEV1		
							3kV	87%									•	•	0.24	0.77	0.39	6	19.5	10		MEV1D0509SC	

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style							Package Dimensions						Further Information								
Rated Output Voltages	Rated Output Currents	Total Output Power	Nom.	Min.	Max.			Bricks							Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet <i>Available at www.murata-ps.com</i>							
								1/8	1/4	1/2	SM	TH	DIP	SIP	L	W	H	L	W	H									
<b>±9V</b>	±0.056A	1W	12	10.8	13.2	1kV	87%										0.323	0.331	0.335	8.2	8.4	8.5	MTU1D1209MC	MEV1					
							87%															0.39	0.77		0.27	9.8	19.5	6.8	MEV1D1209DC
			15V	13.5V	16.5V	3kV	87%													0.24	0.77	0.39	6		19.5	10	MEV1D1209SC		
							87%														0.39	0.77	0.27		9.8	19.5	6.8	MEV1D1509DC	
							86%															0.24	0.77		0.39	6	19.5	10	MEV1D1509SC
							86%															0.39	0.77		0.27	9.8	19.5	6.8	MEV1D2409DC
	24V	21.6V	26.4V	6kV	86%													0.24	0.77	0.39	6	19.5	10	MEV1D2409SC					
					83%														0.39	0.77	0.27	9.8	19.5	6.8	MEV1D4809SC				
	±0.111A	±0.056A	2W	5V	4.5V	5.5V	5.2kV	79%										0.5	0.77	0.39	12.7	19.7	10.0	MEJ2D0509SC	MEJ2				
								81%														0.5	0.77	0.39		12.7	19.7	10.0	MEJ2D1209SC
								80%														0.5	0.77	0.39		12.7	19.7	10.0	MEJ2D1509SC
				5V	4.5V	5.5V	1kV	81%													0.39	0.77	0.3	9.8	19.5	7.7	NMH0509DC	NMH	
								81%														0.3	0.77	0.4	7.5	19.5	10		NMH0509SC
								86%														0.5	0.7	0.21	12.7	17.8	6.0		NTH0509MC
								76%														0.58	1.28	0.37	14.7	32.6	9.4		NMS0509C
								83%														0.39	0.77	0.30	9.8	19.5	7.7		NMH1209DC
								83%														0.3	0.77	0.4	7.5	19.5	10		NMH1209SC
				12V	10.8V	13.2V	3kV	83%													0.5	0.7	0.21	12.7	17.8	6.0	NTH1209MC	NTH	
								87%														0.30	0.77	0.4	7.5	19.5	10		NMK1209SC
								81%														0.58	1.28	0.37	14.7	32.6	9.4		NMS1209C
		86%																		0.30	0.77	0.4	7.5	19.5	10	NMK1509SC			
		85%																		0.39	0.77	0.3	9.8	19.5	7.7	NMH2409DC			
		87%																		0.3	0.77	0.4	7.5	19.5	10	NMK2409SC			
		24V	21.6V	26.4V	1kV	82%													0.39	0.77	0.3	9.8	19.5	7.7	NMH4809DC	NMH			
						82%														0.3	0.77	0.4	7.5	19.5	10		NMH4809SC		
						85%														0.39	0.77	0.3	9.8	19.5	7.7		NMH2409DC		
						87%														0.30	0.77	0.4	7.5	19.5	10		NMK2409SC		
						82%														0.39	0.77	0.3	9.8	19.5	7.7		NMH4809DC		
82%																			0.3	0.77	0.4	7.5	19.5	10	NMH4809SC				
<b>±12V</b>		±0.031A	0.75W	5V	4.5V	5.5V	3kV	68%										0.77	0.236	0.394	19.5	6	10	CMR0512S3C	CMR				
								77%														0.3	0.6	0.26		7.7	15.2	6.6	NTA0312MC
				3.3V	2.97V	3.63V	3kV	78%													0.39	0.77	0.21	9.8	19.5	5.4	NKA0312DC	NKA	
	78%																				0.23	0.65	0.3	6	16.6	7.6	NKA0312SC		
	87%																				0.39	0.77	0.27	9.8	19.5	6.8	MEA1D0512DC		MEA1
	87%																				0.24	0.77	0.39	6.0	19.5	10.0	MEA1D0512SC		
	78%																				0.39	0.77	0.21	9.8	19.5	5.4	NKA0512DC		
	77%																				0.23	0.65	0.3	6	16.6	7.6	NKA0512SC		
	77%																0.39	0.77	0.27	9.8	19.5	6.8	NMA0512DC						
	77%																0.24	0.77	0.39	6	19.5	10	NMA0512SC						
	±0.042A			1W	5V	4.5V	5.5V	1kV	87.5%											0.3	0.6	0.26	7.7	15.2	6.6	NTA0512MC	NTA		
									87.5%														0.39	0.77	0.27	9.8		19.5	6.8
		78%																			0.24	0.77	0.39	6	19.5	10		MEV1D0512SC	
		78%																			0.39	0.77	0.27	9.8	19.5	6.8		NMV0512DC	
		79%																			0.24	0.77	0.39	6	19.5	10		NMV0512SC	
		79%																			0.3	0.6	0.26	7.7	15.2	6.6		NTV0512MC	
		12V	10.8V		13.2V	5.2kV	74.5%													0.77	0.390	0.50	19.5	9.95	12.65	MEJ1D0512SC	MEJ1		
							65%														0.39	0.77	0.49	9.8	19.5	12.5		NMJ0512SC	
							89%														0.39	0.77	0.27	9.8	19.5	6.8		MEA1D1212DC	MEA1
							88%														0.24	0.77	0.39	6.0	19.5	10.0		MEA1D1212SC	
							75%														0.39	0.77	0.27	9.8	19.5	6.8		MTU1D1212MC	
							75%														0.3	0.6	0.26	7.7	15.2	6.6		NTA1212MC	
	12V	10.8V	13.2V	1kV	89.5%													0.39	0.77	0.27	9.8	19.5	6.8	MEV1D1212DC	MEV1				
					81%														0.24	0.77	0.39	6	19.5	10		MEV1D1212SC			
					81%														0.39	0.77	0.21	9.8	19.5	5.4		NKA1212DC			
					75%														0.23	0.65	0.30	6	16.6	7.6		NKA1212SC			
					75%														0.39	0.77	0.27	9.8	19.5	6.8		NMV1212DC			
					80%														0.24	0.77	0.39	6	19.5	10		NMV1212SC			

## Dual output bipolar

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style						Package Dimensions						Further Information					
Rated Output Voltages	Rated Output Currents	Total Output Power	Nom.	Min.	Max.			Bricks		SM	TH	DIP	SIP	Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet <i>Available at www.murata-ps.com</i>				
								1/8	1/4					1/2	L	W	H	L	W			H			
±0.042A	1W	12V	10.8V	13.2V	5.2kV	76.5%						•	0.77	0.390	0.50	19.5	9.95	12.65	MEJ1D1212SC	MEJ1					
						65%							•	•	0.39	0.77	0.49	9.8	19.5	12.5	NMJ1212SC	NMJ			
		15V	13.5V	16.5V	1kV	87.5%							•	•	0.39	0.77	0.27	9.8	19.5	6.8	MEA1D1512DC	MEA1			
						78%							•	•	0.24	0.77	0.39	6.0	19.5	10.0	MEA1D1512SC				
						88%								•	•	0.39	0.77	0.27	9.8	19.5	6.8	NMA1512DC	NMA		
						75%								•	•	0.24	0.77	0.39	6	19.5	10	NMA1512DC			
		24V	21.6V	26.4V	3kV	88%							•	•	0.39	0.77	0.27	9.8	19.5	6.8	MEV1D1512DC	MEV1			
						75%							•	•	0.24	0.77	0.39	6	19.5	10	MEV1D1512SC				
						88%								•	•	0.39	0.77	0.27	9.8	19.5	6.8	MEV1D2412DC	MEV1		
						77%								•	•	0.24	0.77	0.39	6	19.5	10	MEV1D2412SC			
		48V	43.2V	52.8V	1kV	83%							•	•	0.39	0.77	0.27	9.8	19.5	6.8	MEA1D4812SC	MEA1			
					3kV	84%							•	•	0.24	0.77	0.39	6	19.5	10	MEV1D4812SC	MEV1			
	±0.063A	1.5W	5V	4.5V	5.5V	8kV	75%						•	•	1.27	0.81	0.4	32.3	20.5	10.2	PWR1304AC	PWR13XXC			
			12V	10.8V	13.2V	8kV	75%							•	•	1.27	0.81	0.4	32.3	20.5	10.2		PWR1310AC		
	±0.083A	2W	5V	4.5V	5.5V	1kV	85%						•		0.323	0.331	0.335	8.2	8.4	8.50	MTU2D0512MC	MTU2			
							82%								•	•	0.39	0.77	0.3	9.8	19.5	7.7	NMH0512DC	NMH	
							82%									•	•	0.3	0.77	0.4	7.5	19.5	10		NMH0512SC
							82%									•		0.5	0.7	0.21	12.7	17.8	6.0	NTH0512MC	NTH
			12V	10.8V	13.2V	3kV	87%							•	•	0.30	0.77	0.4	7.5	19.5	10	NMK0512SC	NMK		
							6kV	77%								•	•	0.58	1.28	0.37	14.7	32.6	9.4	NMS0512C	NMS
							83%									•		0.323	0.331	0.335	8.2	8.4	8.50	MTU2D1212MC	MTU2
							84%										•	•	0.39	0.77	0.30	9.8	19.5	7.7	NMH1212DC
			15V	13.5V	16.5V	3kV	84%							•	•	0.3	0.77	0.4	7.5	19.5	10	NMH1212SC	NMH		
							84%									•		0.5	0.7	0.21	12.7	17.8		6.0	NTH1212MC
87%																•	•	0.30	0.77	0.4	7.5	19.5	10	NMK1212SC	NMK
82%																•	•	0.58	1.28	0.37	14.7	32.6	9.4	NMS1212C	NMS
24V		21.6V	26.4V	1kV	86%							•	•	0.39	0.77	0.3	9.8	19.5	7.7	NMH2412DC	NMH				
					84%									•	•	0.3	0.77	0.4	7.5	19.5		10	NMH2412SC		
					89%										•	•	0.30	0.77	0.4	7.5	19.5	10	NMK2412SC	NMK	
					85%										•	•	0.39	0.77	0.3	9.8	19.5	7.7	NMH4812DC	NMH	
85%											•	•	0.3	0.77	0.4	7.5	19.5	10	NMH4812SC						
±0.13A		3W	5V	4.5V	9V	1kV	76%						•	•	0.58	1.27	0.27	14.7	32.3	7	NDTD0512C	NDTD			
			12V	9V	18V		78%							•	•	0.58	1.27	0.27	14.7	32.3	7	NDTD1212C	NDTD		
			24V	18V	36V		81%							•	•	0.36	1.02	0.49	9.3	26	12.5	NDH2412SC	NDH		
			48V	36V	75V		82%							•	•	0.58	1.27	0.27	14.7	32.3	7	NDTD2412C	NDTD		
±0.25A		6W	5V	4.5V	9V	5.2kV	83%						•		1.26	0.787	0.423	32	20	10.75	NCM6D0512C	NCM6			
			12V	9V	36V		88%							•		1.26	0.787	0.423	32	20	10.75		NCM6D1212C		
			24V	18V	36V	1.5kV	86%							•	•	1.26	0.79	0.39	32	20	10	NCS6D1212C	NCS6		
	48V		18V	75V	5.2kV	87%							•	•	1.26	0.79	0.39	32	20	10	NDS6D2412C	NDS6			
±0.5	12W	5V	4.5V	9V	5.2kV	82%						•		1.26	0.787	0.423	32	20	10.75	NCM6D4812C	NCM6				
		12V	9V	36V	1.5kV	84%							•	•	1.26	0.79	0.39	32	20	10		NCS6D4812C	NCS6		
		24V	18V	36V	1.5kV	85%							•	•	1.26	0.787	0.394	32	20	10	NCS12D1212C	NCS12			
		48V	18V	75V	1.5kV	85%							•	•	1.26	0.787	0.394	32	20	10	NCS12D4812C				
±0.625A	15W	24V	9V	36V	2.25kV	86%						•		1.1	0.35	0.96	27.9	8.9	24.4	BEI15-120-Q12	BEI15-Series				
		48V	18V	75V	2.25kV	85.5%							•		1.1	0.35	0.96	27.9	8.9	24.4		BEI15-120-Q48			
±0.84A	2W	5V	4.5V	5.5V	5.2kV	80%						•		0.5	0.77	0.39	12.7	19.7	10.0	MEJ2D0512SC	MEJ2				
		12	10.8V	13.2V	5.2kV	81%							•		0.5	0.77	0.39	12.7	19.7	10.0		MEJ2D1212SC			
		15V	13.5V	16.5V	5.2kV	80%							•		0.5	0.77	0.39	12.7	19.7	10.0		MEJ2D1512SC			
±15V	±0.025A	0.75W	5V	1.5V	5.5V	3kV	79%						•		0.77	0.236	0.394	19.5	6	10	CMR0515S3C	CMR			
			12V	10.8V	13.2V											•		0.77	0.236	0.394	19.5		6	10	CMR1215S3C
	±0.033A	1W	3.3V	2.97V	3.63V	1kV	77%						•	•	0.39	0.77	0.21	9.8	19.5	5.4	NKA0315DC	NKA			
																			•	•	0.23		0.65	0.30	6
												•		0.3	0.6	0.26	7.7	15.2	6.6	NTA0315MC	NTA				

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style							Package Dimensions						Further Information										
Rated Output Voltages	Rated Output Currents	Total Output Power	Nom.	Min.	Max.			Bricks							Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet <i>Available at www.murata-ps.com</i>									
								1/8	1/4	1/2	SM	TH	DIP	SIP	L	W	H	L	W	H											
<b>±15V</b>	±0.033A	1W	5V	4.5V	5.5V	1kV	87.5%										0.39	0.77	0.27	9.8	19.5	6.8	MEA1D0515DC	MEA1							
							87%															0.24	0.77		0.39	6.0	19.5	10.0	MEA1D0515SC		
							88%															0.323	0.331	0.335	8.2	8.4	8.5	MTU1D0515MC	MTU1		
							78%															0.39	0.77	0.27	9.8	19.5	6.8	NMA0515DC	NMA		
							78%															0.24	0.77	0.39	6.0	19.5	10.0	NMA0515SC			
						3kV	78%															0.30	0.60	0.26	7.7	15.2	6.6	NTA0515MC	NTA		
							88%															0.39	0.77	0.27	9.8	19.5	6.8	MEV1D0515DC	MEV1		
							88%															0.24	0.77	0.39	6	19.5	10	MEV1D0515SC			
							79%															0.39	0.77	0.21	9.8	19.5	5.4	NKA0515DC	NKA		
							79%															0.23	0.65	0.30	6.0	16.6	7.6	NKA0515SC			
			5.2kV	79%															0.39	0.77	0.27	9.8	19.5	6.8	NMV0515DC	NMV					
				80%															0.24	0.77	0.39	6.0	19.5	10.0	NMV0515SC						
				75.5%															0.30	0.60	0.26	7.7	15.2	6.6	NTV0515MC	NTV					
				65%															0.77	0.390	0.50	19.5	9.95	12.65	MEJ1D0515SC	MEJ1					
																				0.39	0.77	0.49	9.8	19.5	12.5	NMJ0515SC	NMJ				
			±0.033A	1W	12V	10.8V	13.2V	1kV	88%											0.39	0.77	0.27	9.8	19.5	6.8	MEA1D1215DC	MEA1				
									88%														0.24	0.77	0.39	6.0		19.5	10.0	MEA1D1215SC	
									88%															0.323	0.331	0.335	8.2	8.4	8.5	MTU1D1215MC	MTU1
									76%															0.39	0.77	0.27	9.8	19.5	6.8	NMA1215DC	NMA
									76%															0.24	0.77	0.39	6.0	19.5	10.0	NMA1215SC	
	3kV	76%																				0.30	0.60	0.26	7.7	15.2	6.6	NTA1215MC	NTA		
		88.5%																				0.39	0.77	0.27	9.8	19.5	6.8	MEV1D1215DC	MEV1		
		82%																				0.24	0.77	0.39	6	19.5	10	MEV1D1215SC			
		82%																				0.39	0.77	0.21	9.8	19.5	5.4	NKA1215DC	NKA		
		76%																				0.23	0.65	0.30	6.0	16.6	7.6	NKA1215SC			
	5.2kV	76%																				0.39	0.77	0.27	9.8	19.5	6.8	NMV1215DC	NMV		
		82%																				0.24	0.77	0.39	6.0	19.5	10.0	NMV1215SC			
		82%																				0.30	0.60	0.26	7.7	15.2	6.6	NTV1215MC	NTV		
		77%																				0.77	0.390	0.50	19.5	9.95	12.65	MEJ1D1215SC	MEJ1		
		65%																				0.39	0.77	0.49	9.8	19.5	12.5	NMJ1215SC	NMJ		
	±0.033A	1W	15V	13.5V	16.5V	1kV	89.5%											0.39	0.77	0.27	9.8	19.5	6.8	MEA1D1515DC	MEA1						
							80%														0.24	0.77	0.39	6.0		19.5	10.0	MEA1D1515SC			
							80%															0.39	0.77	0.27	9.8	19.5	6.8	NMA1515DC	NMA		
						90.5%															0.24	0.77	0.39	6.0	19.5	10.0	NMA1515SC				
						3kV	90.5%															0.39	0.77	0.27	9.8	19.5	6.8	MEV1D1515DC	MEV1		
							77%															0.24	0.77	0.39	6	19.5	10	MEV1D1515SC			
						5.2kV	77%															0.39	0.77	0.27	9.8	19.5	6.8	NMV1515DC	NMV		
							76.5%															0.24	0.77	0.39	6.0	19.5	10.0	NMV1515SC			
						±0.033A	1W	24V	21.6V	26.4V	1kV	88%											0.39	0.77	0.27	9.8	19.5	6.8	MEA1D2415DC	MEA1	
												88.5%														0.24	0.77	0.39	6.0		19.5
3kV	87.5%																				0.39	0.77	0.27	9.8	19.5	6.8	MEV1D2415DC	MEV1			
	88%																				0.24	0.77	0.39	6	19.5	10	MEV1D2415SC				
5.2kV	78.5%																				0.77	0.390	0.50	19.5	9.95	12.65	MEJ1D2415SC	MEJ1			
±0.033A	1W	48V	43.2V	52.8V	1kV	83.5											0.24	0.77	0.39	6.0	19.5	10.0	MEA1D4815SC	MEA1							
					3kV	85%													0.24	0.77	0.39	6	19.5	10	MEV1D4815SC	MEV1					
±0.05A	1.5W	5V	4.5V	5.5V	8kV	75%											1.27	0.81	0.40	32.3	20.5	10.2	PWR1305AC	PWR13XXC							
					10.8V	13.2V	8kV	75%											1.27	0.81	0.40	32.3	20.5		10.2	PWR1311AC					
					7V	16V	5kV	69%												1.65	1.13	0.41	41.9		28.6	10.3	PWR1726AC				
					15V	13.5V	16.5V	8kV	75%											1.27	0.81	0.40	32.3		20.5	10.2	PWR1317AC				
±0.067A	2W	5V	4.5V	5.5V	1kV	84%											0.39	0.77	0.30	9.8	19.5	7.7	NMH0515DC	NMH							
						84%														0.30	0.77	0.40	7.5		19.5	10.0	NMH0515SC				
					1kV	84%														0.50	0.70	0.21	12.7	17.8	6.0	NTH0515MC	NTH				
					3kV	87%														0.30	0.77	0.4	7.5	19.5	10	NMK0515SC	NMK				
					5.2kV	79%														0.5	0.77	0.39	12.7	19.7	10.0	MEJ2D0515SC	MEJ2				
		6kV	78%														0.58	1.28	0.37	14.7	32.6	9.4	NMS0515C	NMS							
		12V	10.8V	13.2V	1kV	84%													0.39	0.77	0.30	9.8	19.5	7.7	NMH1215DC	NMH					
						84%														0.30	0.77	0.40	7.5	19.5	10.0		NMH1215SC				
					1kV	84%														0.50	0.70	0.21	12.7	17.8	6.0	NTH1215MC	NTH				
					3kV	87%														0.30	0.77	0.4	7.5	19.5	10	NMK1215SC	NMK				
5.2kV	82%																	0.5	0.77	0.39	12.7	19.7	10.0	MEJ2D1215SC	MEJ2						

## Dual output bipolar

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style						Package Dimensions						Further Information					
Rated Output Voltages	Rated Output Currents	Total Output Power	Nom.	Min.	Max.			Bricks		SM	TH	DIP	SIP	Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet <i>Available at www.murata-ps.com</i>				
								1/8	1/4					1/2	L	W	H	L	W			H			
<b>±15V</b>	±0.067A	2W	12V	10.8V	13.2V	6kV	82%						0.58	1.28	0.37	14.7	32.6	9.4	NMS1215C	NMS					
							84%							0.30	0.77	0.40	7.5	19.5	10.0	NMH1515SC	NMH				
			15V	13.5V	16.5V	3kV	88%								0.30	0.77	0.4	7.5	19.5	10	NMK1515SC	NMK			
							79%							0.5	0.77	0.39	12.7	19.7	10.0	MEJ2D1515SC	MEJ2				
			24V	21.6V	26.4V	1kV	86%								0.39	0.77	0.30	9.8	19.5	7.7	NMH2415DC	NMH			
							89%							0.30	0.77	0.40	7.5	19.5	10.0	NMH2415SC					
	48V	43.2V	52.8V	1kV	85%								0.39	0.77	0.30	9.8	19.5	7.7	NMH4815DC	NMH					
					85%							0.30	0.77	0.40	7.5	19.5	10.0	NMH4815SC							
	±0.1A	3W	5V	4.5V	9V	1kV	75%							0.58	1.27	0.27	14.7	32.3	7.0	NDTD0515C	NDTD				
							78%							0.58	1.27	0.27	14.7	32.3	7.0	NDTD1215C					
			12V	9V	18V	1kV	78%								1.13	1.13	0.41	28.6	28.6	10.7	PWR70C	PWR70C			
							66%							0.36	1.02	0.49	9.3	26.0	12.5	NDH2415SC	NDH				
			15V	18V	36V	1kV	82%								0.58	1.27	0.27	14.7	32.3	7.0	NDTD2415C	NDTD			
							81%							0.58	1.27	0.27	14.7	32.3	7.0	NDTD4815C					
	48V	36V	75V	1kV	81%								0.58	1.27	0.27	14.7	32.3	7.0	NDTD4815C						
					60%							2.00	2.00	0.40	50.8	50.8	10.2	PWR1546AC	PWR1546A						
	±0.167A	5W	5W	4.5V	5.5V	0.75kV	60%							2.00	2.00	0.40	50.8	50.8	10.2	PWR1546AC	PWR1546A				
							83%							1.26	0.787	0.423	32	20	10.75	NCM6D0515C	NCM6				
							12V	9V	36V	5.2kV	87%								1.26	0.787		0.423	32	20	10.75
											87%							1.26	0.79	0.39	32	20	10	NCS6D1215C	NCS6
24V							18V	36V	1.5kV	87.5%								1.26	0.79	0.39	32	20	10	NDS6D2415C	NDS6
										83%							1.26	0.787	0.423	32	20	10.75	NCM6D4815C	NCM6	
48V	18V	75V	1.5kV	84%								1.26	0.79	0.39	32	20	10	NCS6D4815C	NCS6						
				86%							1.26	0.787	0.394	32	20	10	NCS12D1215C	NCS12							
48V	18V	75V	1.5kV	85%								1.26	0.787	0.394	32	20	10		NCS12D4815C						
				±0.4	12W	12V	9V	36V	1.5kV	86%						1.1	0.35	0.96	27.9	8.9	24.4	BEI15-150-Q12	BEI15-Series		
84%													1.1	0.35	0.96	27.9	8.9	24.4	BEI15-150-Q48						
±0.50A	15W	24V	9V	36V	2.25kV	84%							1.1	0.35	0.96	27.9	8.9	24.4	BEI15-150-Q12						
						86%							1.1	0.35	0.96	27.9	8.9	24.4	BEI15-150-Q48						

# Dual output

## Asymmetric Isolated DC-DC Converter Series

Asymmetric duals are isolated, 2-output DC/DC converters that typically provide two low voltages such as 3.3V and 1.8V. As such, they are ideal for driving the core and I/O logic of complex PLDs or ASICs. On DSL line cards, they can power both the DSP and the line

drivers. In evolving process-control systems, they can power older 5V logic and newer 3.3V micros.

Asymmetric duals provide the real estate and cost savings of a single package with one set of input circuitry. On the output

side, many duals feature 2-loop designs that effectively deliver two independently regulated converters in a single package with a standard pinout and internationally recognized safety approvals.

Output Characteristics			Input Voltage			Isolation	Efficiency	Package Style						Package Dimensions						Further Information	
Rated Output Voltages	Rated Output Currents	Total Output Power	Nom.	Min.	Max.			Bricks		SM	TH	DIP	SIP	Inches			mm			Part Number <i>Note: Root part numbers may be shown. Please refer to datasheets for available options.</i>	Datasheet <i>Available at www.murata-ps.com</i>
								1/8	1/4					1/2	L	W	H	L	W		
<b>5/3.3V</b>	<b>6/7A</b>	<b>33W</b>	12V	10V	18V	1.5kV	86%						2.00	2.00	0.45	50.8	50.8	11.4	BWR-5/6-3.3/7-D12-C	BWR-5/3.3 33W	
							88%						2.00	2.00	0.45	50.8	50.8	11.4	BWR-5/6-3.3/7-D24-C		
							88%						2.00	2.00	0.45	50.8	50.8	11.4	BWR-5/6-3.3/7-D48-C		
<b>5/5V</b>	<b>0.1/0.1A</b>	<b>1W</b>	5V	4.5V	5.5V	1.0kV	70%						0.39	0.77	0.27	9.8	19.5	6.8	NMD050505DC	NMD	
														0.24	0.77	0.39	6.0	19.5	10.0		NMD050505SC
<b>5/9V</b>	<b>0.1/0.056A</b>	<b>1W</b>	5V	4.5V	5.5V	1.0kV	80%						0.39	0.77	0.27	9.8	19.5	6.8	NMD050509DC	NMD	
														0.24	0.77	0.39	6.0	19.5	10.0		NMD050509SC
			12V	10.8V	13.2V	1.0kV	80%								0.39	0.77	0.27	9.8	19.5		6.8
											0.24	0.77	0.39	6.0	19.5	10.0	NMD120509SC				
<b>5/12V</b>	<b>0.1/0.042A</b>	<b>1W</b>	5V	4.5V	5.5V	1.0kV	80%						0.24	0.77	0.39	6.0	19.5	10.0	NMD050512SC	NMD	
							80%						0.24	0.77	0.39	6.0	19.5	10.0	NMD120512SC		
<b>5/15V</b>	<b>0.1/0.034A</b>	<b>1W</b>	5V	4.5V	5.5V	1.0kV	80%						0.24	0.77	0.39	6.0	19.5	10.0	NMD050515SC	NMD	
							80%						0.39	0.77	0.27	9.8	19.5	6.8	NMD120515DC		
			12V	10.8V	13.2V	1.0kV	80%								0.24	0.77	0.39	6.0	19.5		10.0



# LXDC Series

## µDCDC Converters

- Low EMI noise and small footprint due to **inductor-embedded ferrite substrate**
- High efficiency using synchronous rectifier technology and PFM/PWM auto-select function
- Operating temperature range: -40 to +85°C (105°C for 2XQ)

Type	Load current	Series	W x L x T (mm)	Application circuit	Part Number	Input Voltage (V)	Output Voltage (V)	Max. Iout (mA)	Switch. Freq.	Pkg. (pcs/reel)
Buck	≤0.6A	2HL	2.5×2.0×1.1		LXDC2HL10A-080	2.3-5.5	1.0	600	3MHz	3000
					LXDC2HL12A-050		1.2			
					LXDC2HL13A-082		1.3			
					LXDC2HL1DA-087	2.35-5.5	1.35			
					LXDC2HL15A-051	2.5-5.5	1.5			
					LXDC2HL18A-052	2.8-5.5	1.8			
		LXDC2HL25A-053	3.5-5.5	2.5	500					
		LXDC2HL28A-243		2.8	450					
		LXDC2HL30A-054		3.0	400					
		LXDC2HL33A-055	2.3-5.5	3.3	300					
		LXDC2HN10A-132		1.0						
		LXDC2HN12A-099		1.2						
	LXDC2HN13A-236	1.3								
	LXDC2HN1DA-133	2.35-5.5	1.35							
	LXDC2HN15A-126	2.5-5.5	1.5							
	LXDC2HN18A-097	2.8-5.5	1.8							
	LXDC2HN25A-134	3.5-5.5	2.5	500						
	LXDC2HN28A-235		2.8	450						
	LXDC2HN30A-135		3.0	400						
	LXDC2HN33A-136	3.8-5.5	3.3	300						
	2UR	2.5×2.3×1.2		LXDC2UR12A-118	2.3-5.5	1.2	600	6MHz	3000	
				LXDC2UR15A-119	2.5-5.5	1.5				
				LXDC2UR18A-120	2.8-5.5	1.8				
				LXDC2UR30A-143	3.7-5.5	3.0				
LXDC2UR33A-122				3.8-5.5	3.3					
≤1.5A	2XQ	2.6×2.8×1.14		LXDC2XQ10A-251	2.7-5.5	1.0	1.5A	3MHz	3000	
				LXDC2XQ11A-298		1.2				
				LXDC2XQ12A-252		1.35				
				LXDC2XQ1DA-299		1.5				
				LXDC2XQ18A-253		1.8				
				LXDC2XQ25A-300		2.5				
				LXDC2XQ33A-254		3.3				
800mA										
≤3A	55K	5.7×5.0×2.1		LXDC55KAAA-205	2.7-5.5	0.8-3.6 Set by trim resistor	3000	3MHz	1000	
≤1.5A	55F	5.7×5.0×2.1		LXDC55FAAA-203	4.0-14.0	0.8-5.3 Set by trim resistor	1500	2.5MHz	1000	
Buck/ Boost	≤1A Buck Mode/ ≤800mA Boost Mode	3EC	3.5×3.2×1.3		LXDC3ECAAD-202	2.5-5.5	3.2-3.4V Set at factory	≤1A Buck Mode/ ≤800mA Boost Mode	6MHz	1000
Boost	≤0.7A	44A	4.0×4.0×2.0		LXDC44AAAC-169	2.7-5.5	5.0	700	3.3MHz	1000

Product images not to scale.

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