

Introducing

The Latest Products

from Murata Power Solutions

- **AC-DC Power Supplies**
- **DC-DC Converters**
- **Digital Panel Meters**



Innovation...

New solutions. Just what you'd expect from the market-leading supplier of power electronics.

From standard models to modified products and complete custom designs, we have a long history of designing solutions to meet even the most stringent and challenging requirements. We are the largest supplier of board mount power and among the top five suppliers of power electronics overall, and proudly support the global efforts to advance the standards for power efficiency and reliability.



European
Power Supply
Manufacturers Association

AC-DC Power Supplies

03

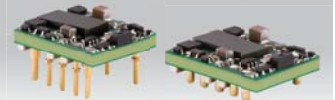
We are able to produce power supplies to the highest standards in terms of power, performance, efficiency, protection, approvals compliance, and cooling for a multitude of application requirements.



Bricks

05

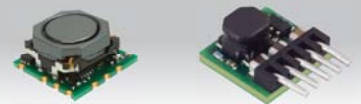
We offer surface mount or through-hole package styles with 12V, 24V, and 48V inputs and with output voltages from 1.2 to 54V.



Point of Load DC-DC Converters

08

Okami modules are ideal for powering the latest generation of FPGAs and DSPs, are drop-in replacements for other DOSA-compliant parts, and are a competitive alternative to discrete designs.



Isolated DC-DC Converters

10

Power from 0.25 to 340 Watts; currents from 0.02 to 80 Amps; voltages from 1.2 to 96 Volts; inputs from 3 to 75 Volts.



Digital Panel Meters

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The DATEL offering of digital panel meters has been recognized as the industry's most versatile and are expertly designed for a variety of applications.



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1 Safety Critical Component means any component whose failure to perform could cause the failure of, or affect the operation of a Life Support Device.

2 Life Support Device means any device, system or ancillary equipment intended for implant into the body or used in relation to supporting or sustaining life.

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Medically Approved AC-DC Open Frame Power Supplies

| Model Number | Natural Convection Cooling | Forced Air Cooling | Load Current | Input Voltage | Output Voltage | Typical Efficiency |
|--------------|----------------------------|--------------------|--------------|-------------------------|----------------|--------------------|
| MVAD040-12 | 40W | | 0 to 3.34A | 90-264Vac 120-300Vdc | 12Vdc | 87% |
| MVAD040-24 | | | 0 to 1.67A | | 24Vdc | 88% |
| MVAD040-48 | | | 0 to 0.84A | | 48Vdc | 89% |
| MVAD065-12 | 65W | | 0 to 5.0A | 90-264Vac 120-300Vdc | 12Vdc | 88% |
| MVAD065-24 | | | 0 to 2.71A | | 24Vdc | 89% |
| MVAD065-48 | | | 0 to 1.36A | | 48Vdc | 90% |
| MVAB120-12 | 75W | 120W @250LFM | 0 to 10.0A | 90-264Vac 120-300Vdc | 12Vdc | 88% |
| MVAB120-24 | | | 0 to 5.0A | | 24Vdc | 90% |
| MVAB120-48 | | | 0 to 2.5A | | 48Vdc | 91% |

Features

- Highly reliable, clean design
- Remote sense (MVAD065)
- Universal AC Input
- ITE (2nd) and Medical 3rd ed. Safety (MVAD065 and MVAD040)

Specifications

- 2" x 4" low profile standard footprint
- High efficiency up to 91%
- Convection-cooled operation up to 75W
- Less than 0.3W no load input power (MVAD065 and MVAD040) complies with ErP/Energy Star requirement

- 40W, 65W, & 120W Output Power
- 2" x 4"

www.murata-ps.com/n-mvad040
www.murata-ps.com/n-mvad065
www.murata-ps.com/n-mvab120



Medically Approved Highly Efficient Open Frame

High Density AC-DC Front End Power Supplies



| Root Model Number* | Natural Convection Cooling | Forced Air Cooling | Main Output (V1) | Fan Output (V2) | Aux Output (V3)* | Typical Efficiency |
|--------------------|----------------------------|--------------------|------------------|-----------------|-------------------------|--------------------|
| MVAC250-12 | 170W | 250W @250LFM | 12Vdc | 12V | 5V on Aux output models | 93% |
| MVAC250-24 | | | 24Vdc | | | 93% |
| MVAC250-48 | | | 50Vdc | | | 94% |
| MVAC400-12 | 250W | 400W @250LFM | 12Vdc | 12V | | 93% |
| MVAC400-24 | | | 24Vdc | | | 93% |
| MVAC400-48 | | | 50Vdc | | | 94% |

*See data sheet for complete part number and specifications.

Features

- 3rd ed. Medical and ITE safety approved
- Remote sense
- Remote on-off and PS_OK (Aux output models)
- Isolated 12W fan available and 10W standby (on Aux output models)

Specifications

- 3" x 5" x 1.4" standard footprint
- High efficiency up to 94%
- Convection-cooled operation up to 250W
- Active inrush protection
- Current sharing option available

- 250W & 400W Output Power
- 3" x 5"

www.murata-ps.com/n-mvac250
www.murata-ps.com/n-mvac400



Interchangeable AC or DC Input Models

400W DC-DC and AC-DC Front End Power Supplies

| Model Number | Power Output | Input Voltage | Main Output | Standby Output | Airflow | Typical Efficiency |
|--------------------|--------------|---------------|-------------|----------------|---------------|--------------------|
| D1U2-D-400-12-HA4C | 400W | 40-72 Vdc | 12Vdc | 5Vdc | Back to front | 83% |
| D1U2-W-400-12-HA4C | | 90-264 Vac | | | | 85% |

Features

- N+1 redundancy capable, hot pluggable
- ORing FET and active current sharing
- PSMI and SMBus / I²C interface with bicolor LED status indicators
- Overvoltage, overcurrent, overtemperature protection

Specifications

- Slim 54mm width
- Interchangeable AC or DC input models
- 12V main output
- 5V standby output of 15W
- Internal cooling fan (variable speed)

- 400W Output Power
- 54mm

www.murata-ps.com/n-d1u2-d-400
www.murata-ps.com/n-d1u2-w-400





- 850W & 1200W Output Power
- 81mm

www.murata-ps.com/n-d1u3cs-850
www.murata-ps.com/n-d1u3cs-1200

Front End Power Supplies with PMBus™ I²C Interface

850W & 1200W DC-DC and AC-DC Front End Power Supplies



| Model Number | Power Output | Input Voltage | Main Output | Standby Output | Airflow | Typical Efficiency |
|-----------------------|----------------|-------------------------|-------------|----------------|---------------|--------------------|
| D1U3CS-D-850-12-HC4C | 850W | 40-72Vdc | 12Vdc | 3.3Vdc | Back to front | 87% |
| D1U3CS-W-850-12-HC4C | | 90-264Vac | | 3.3Vdc | Back to front | 92% |
| D1U3CS-W-1200-12-HC4C | 1200W 1000W | 180-264Vac 90-180Vac | | 3.3Vdc | Back to front | 92% |
| D1U3CS-W-1200-12-HA4C | | | | 5Vdc | Back to front | |
| D1U3CS-W-1200-12-HC3C | | | | 3.3Vdc | Front to back | |
| D1U3CS-W-1200-12-HA3C | | | | 5Vdc | Front to back | |

Features

- N+1 redundant, hot pluggable
- ORing FET and active current sharing
- Internal cooling fan (variable speed)
- PMBus™ I²C interface

Specifications

- Common 81 x 279mm 1U form factor
- 80 PLUS® Gold Efficiency
- 3.3 or 5V standby output of 20W
- 15.4 to 21.7 Watts per cubic inch density
- Interchangeable with other D1U3CS models



- 1200W Output Power
- 54mm

www.murata-ps.com/n-d1u54p

80 PLUS® Platinum Efficiency

1200W AC-DC Front End Power Supplies



| Model Number | Power Output High Line AC | Power Output Low Line AC | Main Output | Standby Output | Airflow | Typical Efficiency |
|---------------------|---------------------------|--------------------------|-------------|----------------|---------------|--------------------|
| D1U54P-W-1200-HC4PC | 1200W | 1100W | 12Vdc | 3.3Vdc | Back to front | 94% |
| D1U54P-W-1200-HA4PC | | | | 5Vdc | Back to front | |
| D1U54P-W-1200-HC3PC | | | | 3.3Vdc | Front to back | |
| D1U54P-W-1200-HA3PC | | | | 5Vdc | Front to back | |

Features

- N+1 redundant, hot pluggable
- ORing FET and active current sharing
- Internal cooling fan (variable speed)
- PMBus™ I²C interface with status indicators

Specifications

- Common 54 x 321mm 1U form factor
- 80 PLUS® Platinum Efficiency
- 3.3 or 5V standby output of 20W
- 28 Watts per cubic inch density



- 460W Output Power
- 86mm

www.murata-ps.com/n-d1u86g

PMBus™ I²C Interface with Status Indicators

460W AC-DC Front End Power Supplies



| Model Number | Power Output | Main Output | Standby Output | Airflow | Typical Efficiency |
|-----------------------|--------------|-------------|----------------|---------------|--------------------|
| D1U86G-W-460-12-HB4DC | 460W | 12Vdc | 12Vdc | Back to front | 92% |
| D1U86G-W-460-12-HB3DC | | | | Front to back | |

Features

- N+1 redundant, hot pluggable
- ORing FET and droop current sharing
- Internal cooling fan (variable speed)
- PMBus I²C interface with status indicators

Specifications

- Common 86 x 196mm 1U form factor
- 80 PLUS® Gold Efficiency
- 12V standby output of 30W
- 11.1 Watts per cubic inch density





The Industry's First DOSA Compliant 1/32-Brick

1/32-Brick Wide Input Isolated DC-DCs



| Base Model Number | Output | | | Input | Typical Efficiency |
|----------------------|--------------|----------------|------------|----------------|--------------------|
| | Current A | Voltage Vdc | Power W | Voltage Vdc | |
| ULT-3.3/7.5-D48 | 3.3 | 7.5 | 24.75 | 48 (36-75) | 85.5 |
| ULT-5/5-D48 | 5 | 5 | 25 | | 89 |
| ULT-12/2.5-D48 | 12 | 2.5 | 30 | | 92 |

Features

- Industry's first 1/32-brick package
- Through-hole and optional SMT package
- Extensive self-protection shutdown features
- Positive & negative logic on/off control option

Specifications

- Up to 30W output power @ 36 – 48 – 75Vin
- Tiny 0.92 x 0.75 x 0.35" open-frame package
- 1500 Volt Basic input/output isolation
- Operational Temperature Range –40°C to +85°C

www.murata-ps.com/n-ult



94.5% Efficiency 1/8-Brick DC-DC Converter

1/8-Brick 240-Watt Isolated DC-DC Converters



| Base Model Number | Output | | | Input | Typical Efficiency |
|----------------------|--------------|----------------|------------|----------------|--------------------|
| | Current A | Voltage Vdc | Power W | Voltage Vdc | |
| RBE-12/20-D48 | 20 | 11.7 | 234 | 48 (36-75) | 94.5 |

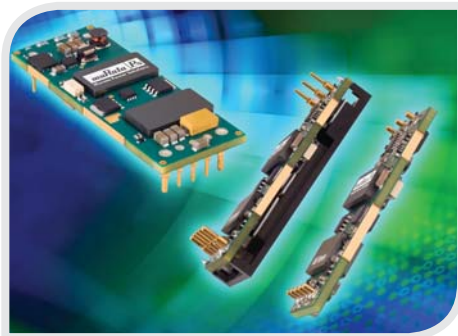
Features

- Standard eighth-brick footprint
- Stable no-load operation
- Extensive protection features – SC, OC, UVLO, OT
- Remote On/Off with positive or negative logic

Specifications

- Fully isolated, 2250Vdc
- 94.5% ultra-high efficiency at full load
- 36 to 75 Vdc input range
- Meets UL/EN/IEC60950-1 safety approvals

www.murata-ps.com/n-rbe



Designed for High Volume Cost Sensitive Telecom

Isolated Low Profile DC-DCs



| Base Model Number | Output | | | Input | Typical Efficiency |
|----------------------|--------------|----------------|------------|----------------|--------------------|
| | Current A | Voltage Vdc | Power W | Voltage Vdc | |
| UEE-5/30-D48 | 30 | 5 | 150 | 48 (36-75) | 92 |
| UEE-12/12.5-D48 | 12.5 | 12 | | | 93 |

Features

- Industry standard DOSA eighth-brick pinout with surface mount (SMT) option
- On/Off control, trim and sense functions
- Extensive self-protection and short circuit features
- Optional baseplate and conformal coating

Specifications

- 2250Vdc input to output isolation voltage
- Typical efficiency up to 93%
- 36 to 75 Vdc input range (48 Vdc nominal)
- Meets UL/EN/IEC 60950-1 and CAN/CSA C22.2 No. 60950-1, 2nd Edition safety approvals

www.murata-ps.com/n-uee





www.murata-ps.com/n-paq

For Microcell Transmitter and Power Amplifier Applications

1/4-Brick 150-Watt Isolated DC-DCs



| Base Model Number | Output | | | Input | Typical Efficiency |
|-------------------|---------|---------|-------|------------|--------------------|
| | Current | Voltage | Power | Voltage | |
| | A | Vdc | W | Vdc | % |
| PAQ-29/5-D48-C | 5 | 29.8 | 150 | 48 (36-75) | 92.5 |

Features

- Positive & negative logic on/off control option
- Industry standard quarter-brick footprint
- Monotonic startup into pre-bias/pre-load output conditions
- Optional baseplate

Specifications

- Trimmable 23.84 (-20%) to 32.78 (10%) Volts output (29.8V, nom)
- Typical efficiency of 92.5%
- 36 to 75 Vdc input range (48 Vdc nominal)
- Meets UL/EN/CSA60950-1 safety approvals



www.murata-ps.com/n-rbq

1/4-Brick DC-DC designed for telecom applications

400-Watt Isolated DC-DC Converters



| Base Model Number | Output | | | Input | Typical Efficiency |
|-------------------|---------|---------|-------|------------|--------------------|
| | Current | Voltage | Power | Voltage | |
| | A | Vdc | W | Vdc | % |
| RBQ-12/33-D48 | 33 | 11.85 | 391 | 48 (36-75) | 96 |

Features

- Regulated Intermediated Bus Architecture (RIBA) with PoL converters
- Standard quarter-brick footprint
- Multiple-unit parallel operation for increased current

Specifications

- Fully isolated, 2250Vdc
- 96% ultra-high efficiency at full load
- 36 to 75 Vdc input range (48 Vdc nominal)
- Meets UL/EN/IEC60950-1 safety approvals



www.murata-ps.com/n-uwq

Ultra-Wide Input Quarter-Brick DC-DC Converter

240W Isolated DC-DCs



| Base Model Number | Output | | | Input | Typical Efficiency |
|-------------------|---------|---------|-------|------------|--------------------|
| | Current | Voltage | Power | Voltage | |
| | A | Vdc | W | Vdc | % |
| UWQ-12/17-Q48 | 17 | 12 | 204 | 48 (18-75) | 92 |

Features

- DOSA-compatible pinout and form factor
- High efficiency synchronous rectifier topology
- Industry-standard quarter-brick open-frame package
- Remote On/Off with positive or negative logic

Specifications

- Fixed DC outputs, 12V @17A
- Wide range 18 to 75 Vdc input voltages
- Up to 2250Vdc isolation
- Certified to UL/EN 60950-1, CSA-C22.2 No. 60950-1, 2nd edition safety approvals





162 W 54 Vout Half-Brick for PoE Applications

1/2-Brick Ethernet Power Isolated DC-DCs

| Base Model Number | Output | | | Input Voltage Vdc | Typical Efficiency % |
|-------------------|-----------|-------------|---------|-------------------|----------------------|
| | Current A | Voltage Vdc | Power W | | |
| EMH-54/3-Q48 | 3 | 54 | 162 | 48 (18-72) | 91.5 |

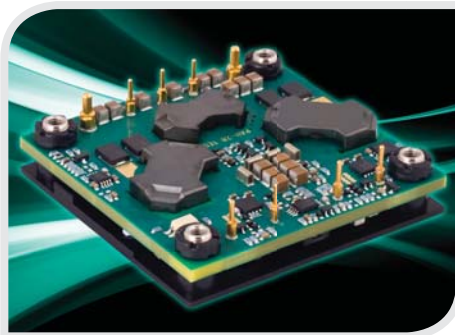
Features

- Industry-standard half-brick footprint
- On/Off control (negative logic)
- Over-current, output, and over-temperature protection
- Optional baseplate

Specifications

- Up to 91.5% efficiency at 54V output
- Wide range 18 to 72 Vdc input voltages
- Fully isolated, 2250Vdc
- Operational temperature range -40°C to +85°C with baseplate

www.murata-ps.com/n-emh



93.5% Efficient Half-Brick for Telecom Applications

450 Watt 1/2-Brick Wide Input Isolated DC-DCs

| Base Model Number | Output | | | Input Voltage Vdc | Typical Efficiency % |
|-------------------|-----------|-------------|---------|-------------------|----------------------|
| | Current A | Voltage Vdc | Power W | | |
| PAH-28/12.5-D24 | 12.5 | 28 | 350 | 24 (18-36) | 91 |
| PAH-28/12.5-D48 | | | | 48 (36-75) | 93 |
| PAH-28/16-D48 | 16 | 28 | 448 | | 93.5 |
| PAH-48/8.5-D48 | 8.5 | 48 | 408 | | 94 |
| PAH-53/8.5-D48 | | 53 | 450.5 | | |

Features

- Industry-standard half-brick footprint
- On/Off control (positive or negative logic)
- Output short circuit protection (hiccup technique)
- Standard baseplate for conduction cooled applications

Specifications

- Up to 94% efficiency
- Wide range of input voltages
- Input to Output Isolation, 2250Vdc
- Certified to UL/EN 60950-1, CSA-C22.2 No. 60950-1, 2nd edition safety approvals

www.murata-ps.com/n-pah



Ultra wide 8:1 input range for Railway Applications

3U High Reliability 8:1 Input DC-DC Converters

| Base Model Number | Output | | | Input Voltage Vdc | Typical Efficiency % |
|-------------------|-----------|-------------|---------|-------------------|----------------------|
| | Current A | Voltage Vdc | Power W | | |
| UCR100-050-T72-C | 20 | 5.1 | 100 | 72 (16.8-137.5) | 87 |
| UCR100-120-T72-C | 10 | 12 | 120 | | 86.5 |
| UCR100-240-T72-C | 5.5 | 24 | 132 | | 90 |

Features

- 3U x 4TE x 165.5mm (111 x 20.3 x 165.5 mm) extruded aluminum cassette module for 19-inch rack mounting
- Ruggedized "no fans" high reliability enclosure with conformal coated components
- Designed specifically for railway power conversion and battery applications

Specifications

- 16.8 to 137.5 VDC wide input voltage range
- Fixed 5.1, 12 or 24Vdc unipolar output up to 120 Watts
- 2250VDC/1500VAC I/O isolation plus RoHS-6 compliance
- Operating temperature range -40 to +85°C

www.murata-ps.com/n-ucr





PoLs Feature Inspectable LGA SMT Package

Programmable Output PoLs



| Base Model Number | Output | | | Input Voltage Vdc | Typical Efficiency % |
|-------------------|--------------|----------------|------------|----------------------|-------------------------|
| | Current A | Voltage Vdc | Power W | | |
| | | | | | |
| OKL(2)-T/1-W12 | 1 | 0.9-5.5 | 5 | 12 (2.9-14) | 90 |
| OKL(2)-T/3-W5 | 3 | 0.6-3.63 | 9.9 | 5 (2.4-5.5) | 95.3 |
| OKL(2)-T/3-W12 | | 0.591-5.5 | 15 | 12 (4.5-14) | 93 |
| OKL(2)-T/6-W5 | 6 | 0.6-3.3 | 19.8 | 5 (2.4-5.5) | 93.5 |
| OKL(2)-T/6-W12 | | 0.591-5.5 | 30 | 12 (4.5-14) | 93 |

Features

- Inspectable Land Grid Array interconnect for ease of manufacturing and inspection
- On/Off control and Power Good signal
- Optional Sequence/Tracking operation

Specifications

- Remote On/Off with positive or negative logic
- Compact 12.2mm x 12.2mm footprint
- Programmable output voltage
- 600-800kHz switching for fast transient response

www.murata-ps.com/okami



1.5A SIP for Datacom and Industrial Equipment

Programmable Output PoLs



| Base Model Number | Output | | | Input Voltage Vdc | Typical Efficiency % |
|-------------------|--------------|----------------|------------|----------------------|-------------------------|
| | Current A | Voltage Vdc | Power W | | |
| | | | | | |
| OKR-T/1.5-W12-C | 1.5 | 0.591-6 | 7.5 | 12 (4.5-14) | 93 |

Features

- Programmable output voltage from 0.591-6.0 VDC
- Outstanding thermal derating performance
- Over temperature and over current protection
- Remote On/Off control and Sense

Specifications

- 600 KHz operation
- 4.5-14 Vdc input voltage range
- Programmable output voltage from 0.591-6.0Vdc
- UL/EN/IEC 60950-1 safety approvals

www.murata-ps.com/okami



Programmable Output 3 and 5-Amp SIP PoL DC-DCs

DOSA Compliant PoLs



| Base Model Number | Output | | | Input Voltage Vdc | Typical Efficiency % |
|-------------------|--------------|----------------|------------|----------------------|-------------------------|
| | Current A | Voltage Vdc | Power W | | |
| | | | | | |
| OKX-T/3-D12 | 3 | 0.7525-5.5 | 15 | 12 (8.3-13.8) | 93 |
| OKX-T/3-W5 | | 0.7525-3.6 | 9.9 | 5 (2.4-5.5) | 94.5 |
| OKX-T/5-D12 | 5 | 0.7525-5.5 | 25 | 12 (8.3-13.8) | 93 |
| OKX-T/5-W5 | | 0.7525-3.6 | 16.5 | 5 (2.4-5.5) | 95 |

Features

- Miniature SIP package suited to space-constrained applications
- Over temperature and over current protection
- Remote On/Off with positive or negative logic

Specifications

- High power conversion efficiency up to 95%
- Programmable output voltage
- 8.3-13.8 or 2.4-5.5 Vdc input voltage range
- Drives 1000 μ F ceramic capacitive loads

www.murata-ps.com/okami





Programmable PoLs for Industrial Applications

3-Amp SMT PoL DC-DCs

DOSA

| Base Model Number | Output | | | Input | Typical Efficiency |
|-------------------|---------|------------|-------|------------|--------------------|
| | Current | Voltage | Power | Voltage | |
| | A | Vdc | W | Vdc | % |
| OKI-T/3-W32 | 3 | 0.7525-4.5 | 13.5 | 24 (9-32) | 89 |
| OKI-T/3-W40 | 3 | 0.75-5.5 | 15 | 24 (16-40) | 88 |
| OKI-T/36W-W40 | 3 | 5.021-15.5 | 36 | 24 (19-40) | 95 |

- SMT PoL
- 0.47"x0.82"x0.34" (11.9x20.8x8.5mm)

www.murata-ps.com/okami

Features

- Drives 1000 μ F ceramic capacitive loads
- Outstanding thermal derating performance
- Over temperature and over current protection

Specifications

- Programmable output voltage
- 3 Amp output current models
- Remote On/Off with positive or negative logic



Ultra-Wide Input in a Compact Package

PoL DC-DC Converters

UL US

| Base Model Number | Output | | | Input | Typical Efficiency |
|------------------------|---------|---------|-------|-----------|--------------------|
| | Current | Voltage | Power | Voltage | |
| | A | Vdc | W | Vdc | % |
| OKI-78SR-3.3/1.5-W36-C | 1.5 | 3.3 | 4.95 | 24 (7-36) | 85.5 |
| OKI-78SR-5/1.5-W36-C | | 5 | 7.5 | | 90.5 |

Features

- Vertical or horizontal SIP-mount, small footprint package
- Outstanding thermal derating performance
- "No heat sink" direct replacement for 3-terminal 78xx-series linear regulators

Specifications

- Ultra wide 7 to 36 VDC input range
- Fixed outputs of 3.3 or 5 VDC up to 1.5 Amps
- High efficiency with no external components
- UL/EN/IEC 60950-1, 2nd Edition safety approvals

- SIP PoL
- 0.41"x0.65"x0.3" (10.4x16.5x7.62mm)

www.murata-ps.com/okami



3A Miniature SIP for Datacom Routers and Servers

Programmable Output PoLs

UL US

| Base Model Number | Output | | | Input | Typical Efficiency |
|-------------------|---------|---------|-------|-------------|--------------------|
| | Current | Voltage | Power | Voltage | |
| | A | Vdc | W | Vdc | % |
| OKR-T/3-W12-C | 3 | 0.591-6 | 15 | 12 (4.5-14) | 93 |

Features

- Drives up to 200 μ F ceramic capacitive loads
- Over temperature and over current protection
- On/Off control
- UL/EN/IEC 60950-1, 2nd Edition safety approvals

Specifications

- 600 KHz operation
- 4.5-14 Vdc input voltage range
- High power conversion efficiency at 93%
- Programmable output voltage of 0.591-6.0Vdc

- SIP PoL
- 0.41"x0.65"x0.4" (10.4x16.5x10.2mm)

www.murata-ps.com/okami





- SIP: 0.45"x0.23"x0.39" (11.48x6x10mm)
- DIP: 0.45"x0.38"x0.27" (11.50x9.8x6.8mm)

www.murata-ps.com/n-mee1

Tight Load Regulation and Improved Efficiency

1kVDC Isolated 1W Single Output DC-DCs



| Base Model Number | Voltage | | Output Current | Load Regulation | Efficiency |
|-------------------|--------------|----------------|---------------------|-----------------|------------|
| | Input (Nom.) | Output | | (%, Max.) | %, Typical |
| MEE1S03xxxC | 3.3V | 3.3/5/9/12/15V | 303/200/111/83/67mA | 12/11/12/11/10 | to 84.5 |
| MEE1S05xxxC | 5V | | | 10/7/9/8/8 | to 85.5 |
| MEE1S12xxxC | 12V | 5/9/12/15V | 200/111/83/67mA | 7/8/6/7 | to 86.5 |
| MEE1S15xxxC | 15V | | | 6/7/5/5 | to 86.5 |
| MEE1S24xxxC | 24V | | | 5/6/5/5 | to 86 |

Features

- Industry standard pinout
- UL60950 recognition
- Pin compatible with LME, NME, NKE & NML series
- Custom solutions available

Specifications

- Fully encapsulated with toroidal magnetics
- Wide temperature performance at full 1 Watt load, -40°C to +85°C
- 3.3V, 5V, 12V, 15V, & 24V input; 3.3V, 5V, 9V, 12V, & 15V output



- 0.77"x0.39"x0.5" (19.65x9.95x12.65mm)

www.murata-ps.com/n-mej2

Fully Encapsulated Through-Hole 2 Watt DC-DCs

5.2kVDC Isolated 2W DC-DC Converters



| Base Model Number | Voltage | | Output Current | Load Regulation | Efficiency |
|-------------------|--------------|--|---|-----------------|------------|
| | Input (Nom.) | Output | | (%, Max.) | %, Typical |
| MEJ2S03 | 3.3V | Single: 3.3/5/9/12/15V Dual: ± 3.3/5/9/12/15V | Single: 606/400/222/167/133mA Dual: ±303/200/111/83/67mA | 17-15 | to 74 |
| MEJ2x05 | 5V | | | 10-7 | to 80 |
| MEJ2x12 | 12V | | | 11-7 | to 82 |
| MEJ2x15 | 15V | | | 10-7 | to 80 |

Features

- UL60601 Edition 3 recognition
- UL60950 recognition
- Pin compatible with MEV, NMV, NMK, & NMJ series
- Basic/Supplementary insulation

Specifications

- Power density 0.81W/cm³
- 5.2kVDC isolation
- 3.3V, 5V, 12V, & 15V input; 3.3V, 5V, 9V, 12V, & 15V output



- 0.5"x0.15"x0.28" (12.7x11x7.05mm)

www.murata-ps.com/n-mte1

88% Efficiency and MSL 1 Moisture Sensitivity Rating

1kVDC Isolated 1W Single Output SM DC-DCs

| Base Model Number | Voltage | | Output Current | Load Regulation | Typical Efficiency |
|-------------------|--------------|------------------|---------------------|-----------------|--------------------|
| | Input (Nom.) | Output | | (%, Max.) | % |
| MTE1S03 | 3.3V | 3.3/5/6/9/12/15V | 303/200/111/83/66mA | 13.5/11/9/8 | to 86 |
| MTE1S05 | 5V | | | 12/8/7.5/6.5 | to 88 |
| MTE1S12 | 12V | 200/111/83/66mA | 200/111/83/66mA | 7/4.5/4 | to 88 |
| MTE1S15 | 15V | | | 5.5/4 | to 88 |
| MTE1S24 | 24V | | | 5.5/4-3.5 | to 88 |

Features

- Surface mount – enclosed case
- Footprint over pins 1.37cm²
- Compatible with J-STD-020D
- Multi-layer ceramic capacitors

Specifications

- MSL rating level 1
- Wide temperature performance at full 1 Watt load, -40°C to 85°C
- 3.3V, 5V, 12V, 15, & 24V input; 3.3V, 5V, 9V, 12V, & 15V output





2-Wire, Self-Powered, Auto-Ranging DC Voltage Monitor

DATEL **nanometer** Panel Mount Voltmeter

| Base Model Number | Input Voltage | Current Consumption | Reverse Polarity Protection |
|----------------------|---------------|--------------------------|-----------------------------|
| | Vdc | mA | Vdc |
| DMR20-10-DCM-R-C | +6 to +75 | @Vin = 75.0Vdc: 7 (max.) | -100 (min.) |

Features

- Installs in "oiltight" 1.20 inch (30.5mm) round cutouts
- Knockout punches and tooling available
- Screw-style terminal block simplifies installation
- Self-resetting internal fuse for long-term reliability
- Supplied with EPDM rubber gasket and plastic hex nut

Specifications

- Self-powered, requires only two connections
- Auto-ranging 6 to 75Vdc input range
- Reverse polarity protected to -100Vdc
- Four-digit LED display with overvoltage indication
- Digital replacement for analog panel meters
- Provides moisture resistance to IP67/NEMA 6

■ 1.50"Ø x 1.08 depth" (38.1x27.4mm)

www.murata-ps.com/n-dmr20-10-dcm



Three-Phase AC Digital Ammeters with Built-In CTs

Three-Phase AC Ammeters



| Base Model Number | Input Current | Input Voltage | Power Consumption | Frequency |
|----------------------|---------------|---------------|-------------------|-----------|
| | Amps | Volts | Watts | Hz |
| ACM3P-4-AC1-x-C | 100 | 85-264Vac | <.25 | 47-63 |

Features

- Measures and displays the true-rms current of 3-phase power systems
- Three built-in current transformers measure up to 100A per phase
- Ideal for power distribution units (PDUs) and backup power systems
- Low-profile surface mount design occupies minimal behind-the-panel space

Specifications

- Available in red, green, or blue LED displays with phase annunciators
- Low power consumption: less than ¼ watt from 120Vac line
- Universal 85-264Vac (47-63Hz) operating voltage range
- One-piece polycarbonate housing fits '0U' & '1U' rack spaces

■ 2.10"x1.43"x0.51" (53.3x36.3x12.95mm)

www.murata-ps.com/n-acm3p



85 to 264Vac, Self-Powered, LED-Display Line Monitor

DATEL **nanometer** Panel Mount Voltage Monitor



| Base Model Number | Input Voltage | Current Consumption | |
|----------------------|---------------|--------------------------|--------------------------|
| | Volts | mA | |
| DMR20-1-ACV-R-C | 85 to 264Vac | @Vin = 250Vac: 30 (max.) | @Vin = 120Vac: 15 (max.) |

Features

- Installs in "oiltight" 1.20 inch (30.5mm) round cutouts
- Knockout punches and tooling available
- Screw-style terminal block simplifies installation
- Self-resetting internal fuse for long-term reliability
- Supplied with EPDM rubber gasket and plastic hex nut

Specifications

- Self-powered directly from the AC supply
- Universal 85 to 264Vac measurement range
- Reads true-rms value to 0.1V resolution
- Four-digit LED display with overvoltage indication
- Digital replacement for analog panel meters
- Provides moisture resistance to IP67/NEMA 6

■ 1.50"Ø x 1.18 depth" (38.1x30mm)

www.murata-ps.com/n-dmr20-1-acv





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