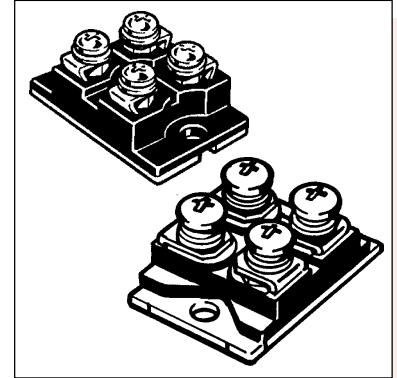


Key features

- 100 watts power dissipation
- special pulse duty options
- voltage proof to 2.5kv ac
- range of terminals/flying leads
- essentially non-inductive
- low pd versions available
- custom designs welcome



Power Resistors

type BDS100 series

Meggitt Electronics are probably alone in offering an elegantly packaged resistor system with wire foil or thick film elements to meet every conceivable need. The BDS 100 is a thick film power resistor and results from more than 30 years experience in power solutions.

N.B. A Range of custom design items with alternative elements in the package and special leads are available, please enquire.

Specification

Electrical

Resistor Range:	R20 ~ 1M (4 Terminal <1 ohm)
Resistance Tolerance:	±10%, 5% (Tighter by Discussion)
TCR (R<1 ohm):	250ppm/°C
TCR (R>1 ohm):	150ppm/°C
Rated Power (Heatsink Temperature @ 115°C):	25 Watts
Maximum Power (Heatsink Temperature @ 100°C):	50 Watts
Maximum Power (Heatsink Temperature @ 60°C):	100 Watts
Parallel Capacitance:	15pf
Capacitance To Earth:	40pf
Series Inductance:	40nH maximum
Limiting Element Voltage:	500V DC/AC RMS
Isolation Voltage (Terminal to Heatsink):	2.5 KV RMS
Single Shot 1.5/50µs:	4 KV
Insulation Resistance @ 500 V DC:	100G Ohms
Partial Discharge:	<10pC/2 KV

Environmental

	TEST CONDITION	TEST RESULT
Endurance (Rated Power):	2000 cycles @ Rated Power	ΔR 0.25% Typical
Humidity Load Life:	56 Days, 40°C, 95% RH	ΔR 0.2% Typical I.R. >10G ohms
Temperature Cycling:	-55C ~ +125°C, 5 cycles	ΔR 0.2% Typical
Operating/Storage Temperature:	-55C ~ +125°C	
Short Term Overload:	150 watts for 10 seconds	ΔR 0.25% Typical
Vibration:	10/500 Hz	ΔR 0.25% Typical
Bump:	40g 4000 Bumps	ΔR 0.25% Typical

Mechanical

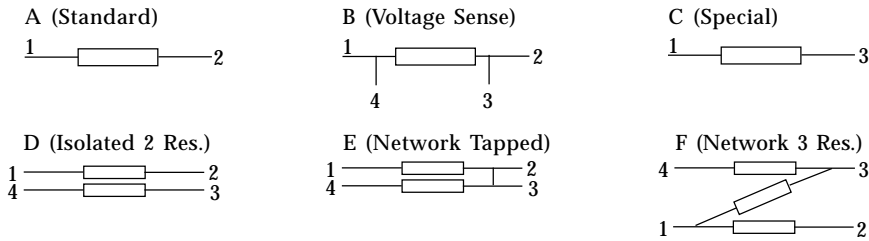
Terminal Size:	M4
Terminal Torque Maximum:	1.3 Nm
Creepage Distance:	10 mm
Air Gap - Terminal to Heatsink:	10 mm
Air Gap - Terminal to Terminal:	3 mm
Heatsink Surface Finish:	< 6µ
Heatsink Flatness:	0.05 mm
Thermal Grease:	Required
Weight:	35 grams

sales action desk (01793) 611666

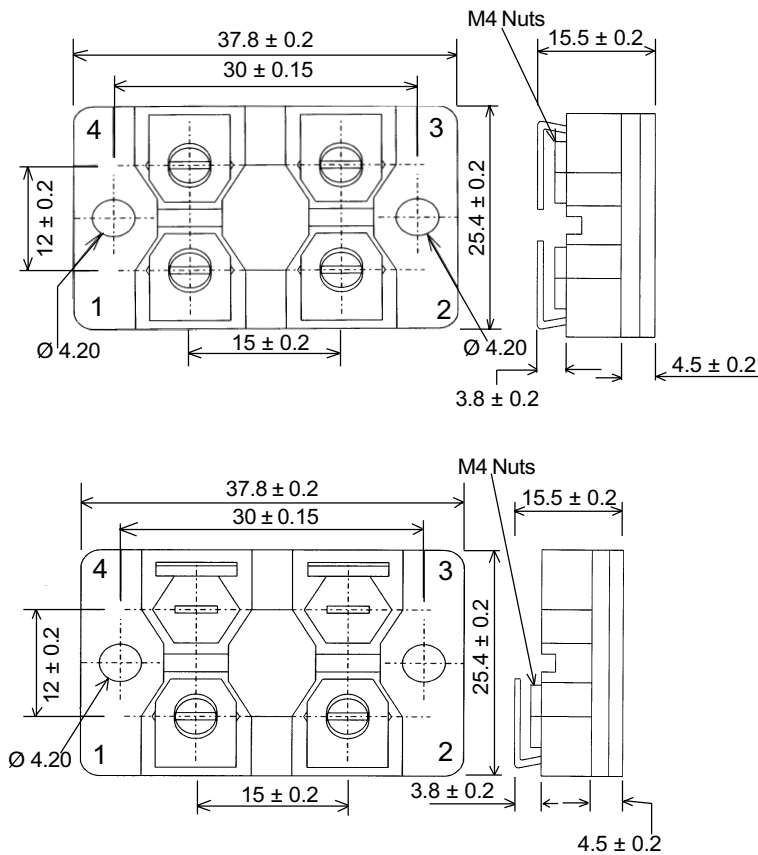
sales fax line (01793) 611777

thick film - for heatsinking

Terminal Circuit Type



Dimensions



Power Resistors

type BDS 100 series

The BDS has been specifically designed for the power generation industry, but is increasingly finding applications in locomotive and other industrial markets where high power, low inductance, long life and exacting pulse requirements are key design parameters. Many resistors are tailored to user specifications because we offer a range of terminal configurations.

How To Order

BDS		2	A
Common Part		Terminal Type	Circuit Type
BDS - Thick Film Resistor		2 - 2 Terminal	See Above
BDH - High Creep Version		4 - 4 Terminal	
BDL - Low Profile Version			
100	1K0		J
Rated Power	Resistance Value		Tolerance
100 - 100 Watts	0.1 ohm (100 milli ohms) R10 1.0 ohm (1000 milli ohms) 1R0 1K ohm (1000 ohms) 1K0		J - 5% K - 10%

Please Request Full Data Sheet L5501