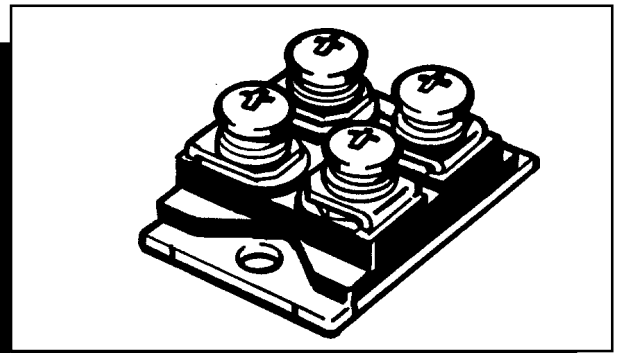


MEGGITT CGS

HIGH VOLTAGE RESISTORS
HIGH VALUE RESISTORS
HIGH POWER RESISTORS
ALUMINIUM CLAD RESISTORS
CURRENT SENSE RESISTORS

High Power Resistors

TYPE BDS 100 SERIES



Meggitt CGS is probably unique in offering an elegantly packaged resistor system with wire foil or thick film elements to meet every conceivable resistor need.

The BDS 100 is a thick film power resistor and results from more than 30 years experience in power solutions.

These resistors have been specifically designed for the power generation industry but are 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 and we offer a range of terminal configurations.

MEGGITT CGS KEY FEATURES

- 100 WATTS POWER DISSIPATION
 - SPECIAL PULSE DUTY OPTIONS
 - VOLTAGE PROOF TO 2KV AC
 - RANGE OF TERMINALS, FLYING LEADS
 - VIRTUALLY NON INDUCTIVE
 - LOW PD VERSIONS AVAILABLE
 - SPECIAL HIGH VOLTAGE DESIGNS AVAILABLE
 - CUSTOM DESIGNS WELCOME
 - AVAILABLE VIA DISTRIBUTION
-

M MEGGITT
ELECTRONIC
COMPONENTS

SALES ACTION DESK
TEL: (01793 611666)
FAX: (01793 611777)
EMAIL: sales@megelec.co.uk
WEB SITE: www.megelec.co.uk

ELECTRICAL

Resistance Range:	R20 - 1MO (4 terminal below 1R)
Resistance Tolerance:	± 10%, ± 5% (Tighter by discussion)
T.C.R. - for R < 1 Ohm:	250 ppm/°C
T.C.R. - for R > 1 Ohm:	150 ppm/°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:	15 pF
Capacitance to Earth:	40 pF
Series Inductance:	40 nH maximum
Limiting Element Voltage:	up to 500 V dc/ac rms (100W or less)
Isolation Voltage (Terminal to Heatsink):	2.5 kV rms
Single Shot (1,5/50ms):	4 kV
Insulation Resistance at 500 Vdc:	100 Gig
Partial Discharge:	80 pC/2 kV < 10pc/2 kV

ENVIRONMENTAL

Endurance (Rated Power):	2000 cycles @ Rated Power 30m/30m
Humidity Load Life:	56 Days, 40°C, 95%RH
Temperature Cycling:	-55°C to +125°C, 5 cycles
Operating / Storage Temp.:	-55°C to +125°C
Short Term Overload:	3 x Rated Power, 10 seconds
Vibration:	10/500 Hz
Bump:	40g 4000

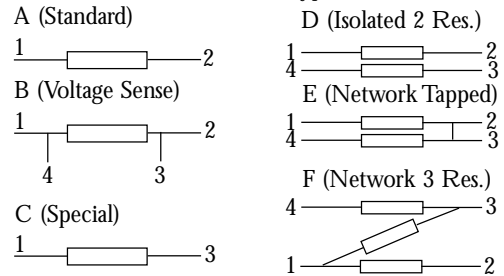
TEST CONDITION

	Δ R 0.25% Typically	
	Δ R 0.25% Typically	(I.R. 10 Gig)
	Δ R 0.25% Typically	
	Δ R 0.25% Typically	
	Δ R 0.25% Typically	
	Δ R 0.25% Typically	

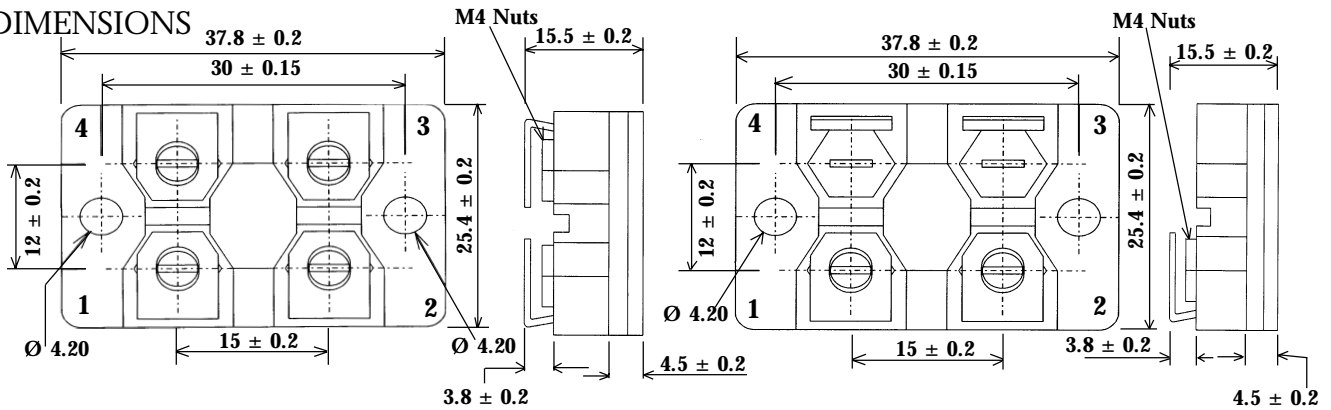
MECHANICAL

Terminal Size:	M4
Terminal Torque:	1.3 Nm
Creepage Distance:	10 mm
Air Gap :Terminal to Heatsink:	10 mm
Air Gap :Terminal to Terminal:	3 mm
Heatsink Surface Finish:	< 6,u
Heatsink Flatness:	0.05 mm
Thermal Grease:	Required
Weight:	35 grms

Terminal Circuit Type



DIMENSIONS



BDS 2	A	100	1KO	K
COMMON PART	CIRCUIT RATING	POWER RATING	RESISTANCE VALUE	TOLERANCE
BDS 2 - Thick Film Resistor 2 Terminal BDS 4 - Thick Film Resistor 4 Terminal BDH 2 - High Voltage Version 2 Terminal BDH 4 - High Voltage Version 4 Terminal	A - Standard see above B - F see above	100 - 100 Watts at 70°C	0.2 Ohm (200 milli Ohms) 1 Ohm (1000 milli Ohms) 1 K Ohm (1000 Ohms) 1 Meg Ohm (1000000 Ohms)	R20 1RO 1KO 1MO K - ±10% J - ±5% F - ±1%

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



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