

MC4 Series

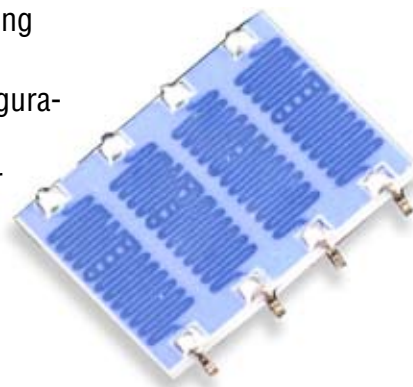
High Voltage 4-Resistor SMD DIP Package

HIGH
VOLTAGE

Ohmite's MC4 Series offers 4 high voltage SMD resistors in a single DIP package, supplied on tape and reel for automated placement. Each resistor provides a rating of 0.75W with a maximum voltage of 2500 VDC. Designers can specify up to 4 different resistor value/tolerance combinations and connect them individually, in series, or parallel to derive countless results. The flexible S-Bend terminals provide solder joint integrity while leaving space between the resistor pack and the PCB. Standard parts are available in single resistance values for immediate delivery.

FEATURES

- Unique terminals allow spacing between board and resistor
- Design allows multiple configurations
- 2,500 volts max. per resistor per pack; 10KV total
- Supplied on tape & reel for automated placement



SERIES SPECIFICATIONS

Series	Resistance Range (Ohms)	Power @25°C per resistor	Max. Operating Voltage	Standard Temperature Coefficient 50PPM/°C	100PPM/°C
MC4	200Ω to 5,000M	0.75W	2,500	200Ω-250M	251M-5,000M

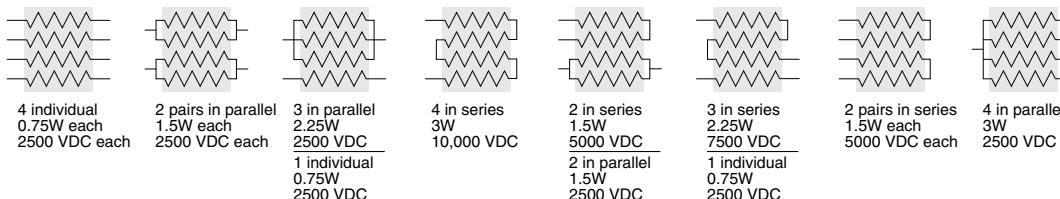
CHARACTERISTICS

Resistor	Thick film on Alumina
Resistance Range	200 ohms to 5,000M
Power Rating	0.75W per resistor, 3.0W total
Voltage Rating	2500 VDC per resistor
Tolerance	5% to 20%
Operating Temperature	-55°C to +180°C
TCR and VCR	see Slim Mox
Solder	Silver solder is recommended for MC4 resistors. Leaching of the silver in the termination will occur if non-silver solder is used. 60/40 tin-lead solders are not recommended for use with the MC4 product.

PERFORMANCE DATA

Characteristic	Test Method	Specification
Humidity	MIL-STD-202, Method 103B, Condition B	±0.25%
Dielectric Withstanding Voltage	MIL-STD-202, Method 301, 750V	±0.25%
Insulation Resistance	MIL-STD-202, Method 302, Condition A or B	>10,000M or greater dry
Thermal Shock	MIL-STD-202, Method 107G, Condition B, B-1, or F	±0.20%
Load Life	MIL-STD-202, Method 108A, Condition D	±1.0%
Resistance to Solvents	MIL-STD-202, Method 215G	No degradation of coating or marking
Shock (Specified Pulse)	MIL-STD-202, Method 213B, Condition I	±0.25%
Vibration, High Frequency	MIL-STD-202, Method 204D, Condition D	±0.20%
Power Conditioning	MIL-R-49462A, Par 4.8	±0.50%

POSSIBLE CONFIGURATIONS



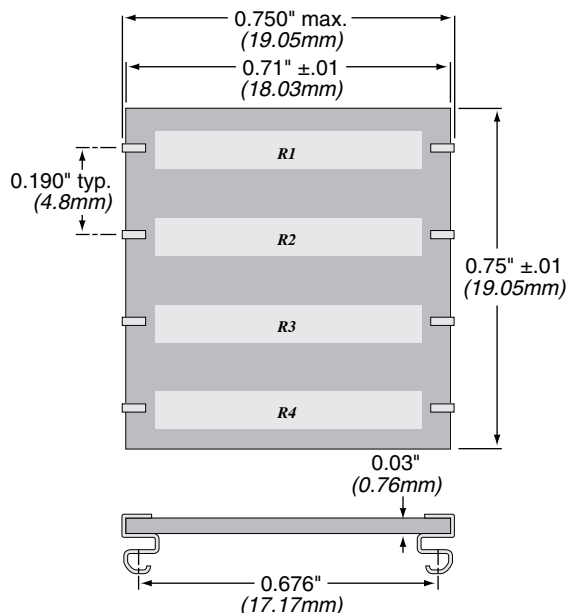
MC4 Series

High Voltage 4-Resistor SMD DIP Package

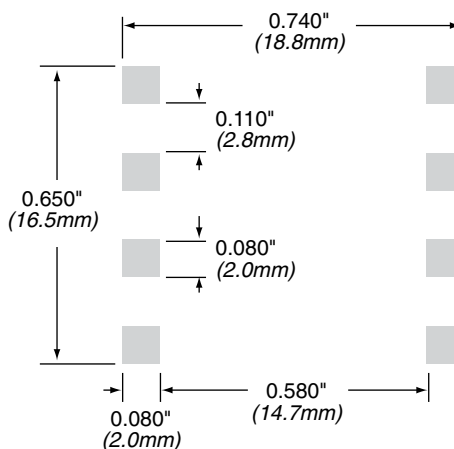
HIGH
VOLTAGE

DIMENSIONS

(in./mm)



Land Pattern



ORDERING INFORMATION

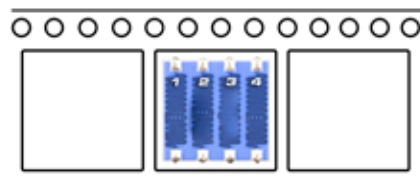
MC4 Series		Tape and Reel	
MC4 - 1002 F E R		E = RoHS compliant optional 250 per reel	
Ohms		Tolerance	
First 3 digits are significant; 4th digit is multiplier (# of zeroes to follow). Examples: 1003 = 100KΩ 5004 = 5MΩ 1007 = 1GΩ		J = 5% K = 10% P = 20%	

Standard Part Numbers

Part	Description
MC4-1003JER	100K ohms per resistor, 5%
MC4-5003JER	500K ohms per resistor, 5%
MC4-1004JER	1M ohms per resistor, 5%
MC4-5004JER	5M ohms per resistor, 5%
MC4-1005JER	10M ohms per resistor, 5%
MC4-5005JER	50M ohms per resistor, 5%
MC4-1006JER	100M ohms per resistor, 5%
MC4-5006JER	500M ohms per resistor, 5%
MC4-1007KER	1G ohms per resistor, 10%
MC4-5007KER	5G ohms per resistor, 10%

*Custom part numbers are assigned sequentially. MC4-SP0001, MC4-SP0002, etc. Go to this link to design your own MC4 resistor and have a unique part number assigned. www.ohmite.com/mc4sp/

Tape and Reel Orientation



Design online at:

www.ohmite.com/mc4sp/