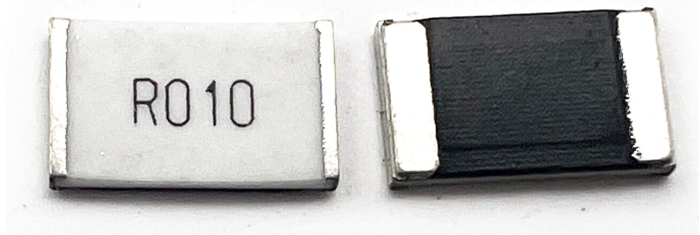


Power Metal Foil on Ceramic Chip Resistors

MFC2817 Series

- Compact size 5W shunt
- TCR down to $\pm 30 \text{ ppm}/^\circ\text{C}$
- Current sensing for power electronics
- High power density



MFC2817 Not Recommended for New Designs

All parts are Pb-free and comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

Electrical Data

		2817
Power rating @70°C	W	5
Overload rating 5s	W	25
Resistance range	mΩ	3 to 150
Standard values	mΩ	E24 preferred
Tolerance	%	± 1
TCR (+25°C to +125°C)	ppm/°C	± 30
Operating temperature	°C	-55 to +155

Physical Data

Dimensions in mm and nominal weight in mg							
Size	L ± 0.30	W ± 0.25	H ± 0.20	A max	B	Wt. nom	
2817	7.1	4.2	0.7	1.0	1.3 \pm 0.5	80 to 140	

Construction

Metal foil resistor material is bonded onto the underside of a 96% alumina substrate and protected. Wrap-around terminations have an electroplated nickel barrier and solder coating.

Marking

MFC2817 parts are marked with ohmic value only. Reels are marked with type, value, tolerance, date code and quantity.

Solvent Resistance

The body protection is resistant to all normal industrial cleaning solvents suitable for printed circuits.

Recommended Pad Dimensions

All dimensions in mm				
Size	Resistance mΩ	A	L	B
2817	All	4.6	8.0	4.6

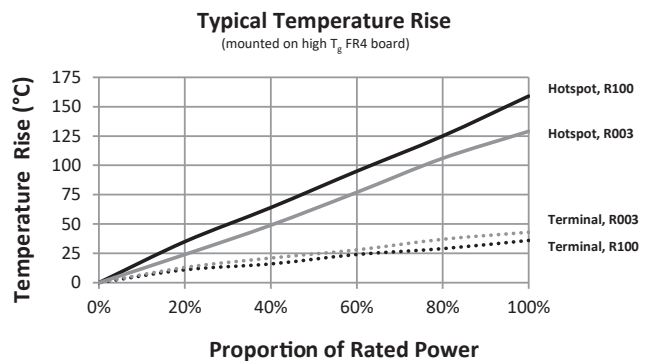
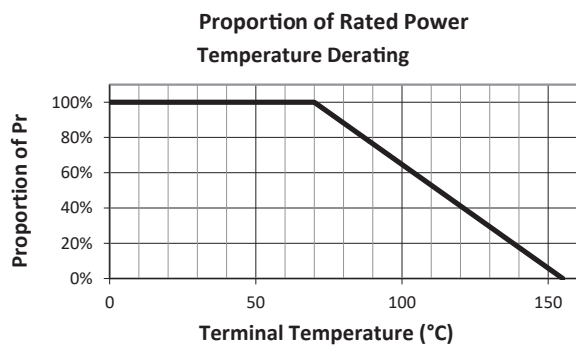
General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

Performance Data

Parameter		Maximum (+0.001Ω)
		2817
Load at rated power: 1000 hours at 70°C, cyclic load	±ΔR%	5
Overload: 5 x rated power for 5 seconds	±ΔR%	5
Moisture: No load, 1000 hours 85°C, 85% RH	±ΔR%	1
Temperature rapid change: 100 cycles, -55°C & 155°C	±ΔR%	0.5
High temperature exposure: 1000 hours at 155°C	±ΔR%	1
Low temperature exposure: 1000 hours at -55°C	±ΔR%	1
Bend strength: 2mm deflection	±ΔR%	1
Resistance to solder heat: 260±5°C for 10s	±ΔR%	0.5
Solderability: 245±5°C for 2s		≥95% coverage
Insulation resistance: 100V DC for 1min	ohms	>100M

Thermal Data



Ordering Procedure

Example: **MFC2817-R01FT1** (MFC2817, 10 milliohms ±1%, Pb-free)



1	2	3	4
Type	Value	Tolerance	Packing
MFC2817	E24 = 3/4 characters R = ohms	F = ±1%	T1 1000/reel

Packaging

MFC2817 resistors are supplied on 12mm embossed carrier tape, on 7 inch reels as per IEC 286-3.

General Note

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Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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