Resistors

Power Metal Foil on Ceramic Chip Resistors



OBSOLETE

MFC2817 Series

- Compact size 5W shunt
- TCR down to ±30ppm/°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 i	A A +++				
Size	L ±0.30	W ±0.25	Н ±0.20	A max	В	Wt. nom	, <i>R020</i>
2817	7.1	4.2	0.7	1.0	1.3±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



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.

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		±ΔR%	1
Iperature rapid change: 100 cycles, -55°C & 155°C		±ΔR%	1
) tepality and the second s		±∆R%	Maximum (+0.001Ω) 1 Μαχίμυμη 2817
tennaeratureexposere:0000/hours at -759°C, cyclic load	±ΔR%	±ΔR%	1 1
Load at rated power: 1000 hours at 70°C, cyclic load	±ΔR%		5
d stopengohad2.6កក្កាយអាមេរិក power for 5 seconds	±ΔR%	±ΔR%	0.5 1
Overload: 5 x rated power for 5 seconds	±ΔR%		5
stancestorsoluteioheat0060450068505, 85% RH	±ΔR%	±ΔR%	0.5 1
Moisture: No load, 1000 hours 85°C, 85% RH	±ΔR%		1
lerabiliterature-repidschange: 100 cycles,-55°C & 155°C	±ΔR%		\geq 95% coverage 1
lemperature rapid change: 100 cycles,-55°C & 155°C	±ΔR%		0.5
la dighternariature exposure: 1000 hours at 155°C High temperature exposure: 1000 hours at 155°C	±ΔR% ±ΔR%	ohms	>100M 1
low temperature exposure: 1000 hours at-55°C	±ΔR%		1
Low temperature exposure: 1000 hours at-55°C	±ΔR%		1
Bend strength: 2mm deflection	±ΔR%		0.5
Bend strength: 2mm deflection	±ΔR%		1
- rapsistance of old reat: 260±5°C for 10s	±ΔR%		0.5
Resistance to solder heat: 260±5°C for 10s	±ΔR%		0.5
Solderability: 245±5°C for 2s Solderability: 245±5°C for 2s			≥95% coverage ≥95% coverage
Insulation resistance: 100V DC for 1min	ohms		>100M
Insulation resistance: 100V DC for 1min	ohms		>100M

Distrating (Durive



size resistors are supplied Jerminala Temperature (, S) on 7 inch reels as per IEC 2

Packaging

Jering_gProcedure

ordering Procedure plemme coses roose to (MPCD609, 5strilliohims)±1%, Pb-free)

0603 size resistors are supplied on 8mm paper carrier tape, all on 7 inch reels as per IEC 286-3. The 0603 size has 5000 chip Example: MFC2817-R01FT1 (MFC2817, 10 milliohms ±1%, Pb-free) MFC2817 resistors are supplied on 12mm embossed carrier tape,

MFC	2 8 1 7 - 1	R 0	1 F T 3 3	4
1	2	3	4	
Туре	Value	Tolerance	Packing	
MFC2817	F24 = 3/4 characters	$F = \pm 1\%$	T1 1000/reel	

R = ohms



Packaging

on 7 inch reels as per IEC 286-3.

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