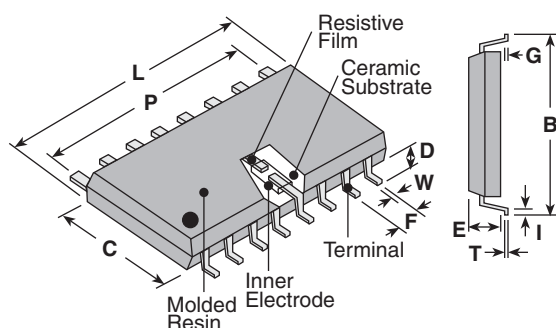


features

- Max. 15 resistor elements can be built in with a 1.27mm terminal pitch
- Low profile: 2.2mm or lower
- Suitable for both reflow and flow solderings
- Improved mechanical strength and reliability by molding structure
- Marking: Black body color
- Products with lead-free terminations meet EU RoHS requirements. Pb located in glass material, electrode and resistor element is exempt per Annex 1, exemption 5 of EU directive 2005/95/EC

dimensions and construction

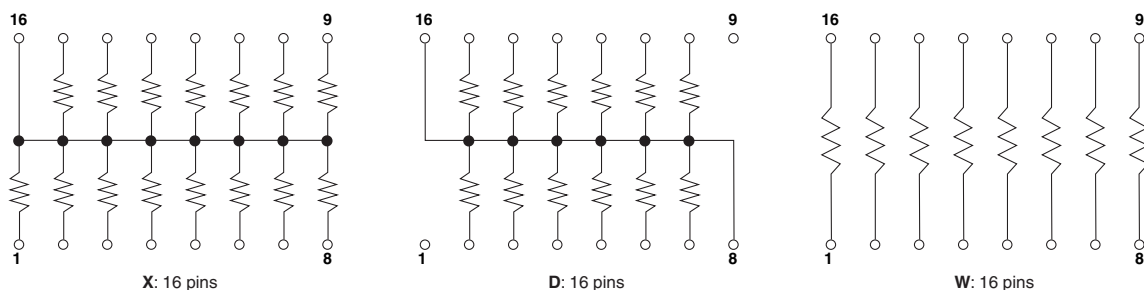


applications

- Damping resistors and pull-up/pull-down resistors for digital circuits

Size Code	Dimensions inches (mm)										
	A	B	C	D	E	F	G	I	T	P	W
MRGF16	.433±.008 (11.0±0.2)	.303±.008 (7.70±0.2)	.224±.008 (5.70±0.2)	.039±.004 (1.00±0.1)	.087 Max. (2.2 Max.)	.050±.004 (1.27±0.1)	.006±.002 (0.15±0.05)	.001 Min. (0.3 Min.)	.006±.008 (0.15±0.02)	.350±.008 (8.89±0.2)	.016±.002 (0.4±0.05)

circuit schematic



ordering information

New Part #	MRGF16	W	T	TEB	102	J
Type						
Package Symbol		X W D				
Termination Material			T: Sn			
Packaging				TEB: Embossed plastic ST: Stick		
Nominal Resistance					3 digits	
Resistance Tolerance						G: ±2% J: ±5%

For further information on packaging, please refer to Appendix A.

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

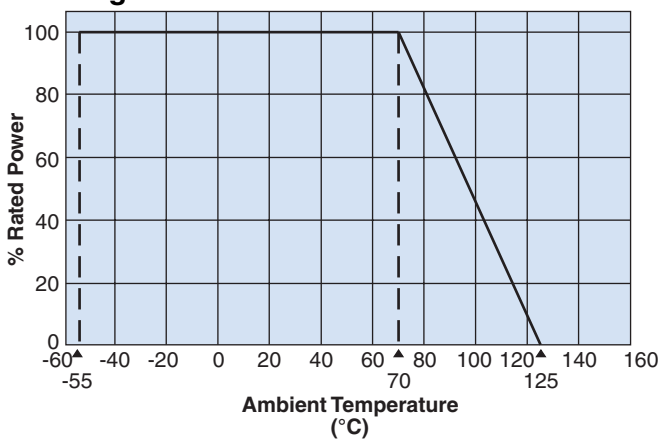
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applications and ratings

Part Designation	Power Rating @ 70°C	Power Rating w/Package	Resistance Range E24	Resistance Tolerance	T.C.R. (ppm/°C)	Maximum Working Voltage	Maximum Overload Voltage	Rated Ambient Temperature	Operating Temperature Range
MRGF16X	0.031	0.5	22Ω - 2.2MΩ	G: ±2% J: ±5%	±200	50V	100V	+70°C	-55°C to +125°C
MRGF16D									
MRGF16W	0.063								

environmental applications

Derating Curve



Performance Characteristics

Parameter	Maximum $\Delta R \pm$ (%+0.05Ω)	Test Method
Resistance	Within specified tolerance	25°C
T.C.R.	Within specified T.C.R.	+25°C/-55°C and +25°C/+125°C
Short Time Overload	±0.5%	Rated voltage times 2.5 or Max. overload voltage whichever is lower, for 5 seconds
Resistance to Soldering Heat	±0.5%	260°C±5°C, 10 seconds ±0.5 second
Rapid Change of Temperature	±0.5%	-55°C (30 min.)/+125°C (30 min.) 5 cycles
Moisture Resistance	2	40°C±2°C, 90%~95% RH, 100h 1.5h ON/0.5h OFF cycle
Endurance at 70°C	2	70°C±3°C, 1000h 1.5h ON/0.5h OFF cycle
High Temperature Exposure	3	125°C±3°C, 1000h