KOA SPEER ELECTRONICS, INC.

MRGF16

mini flat package type thick film resistor networks

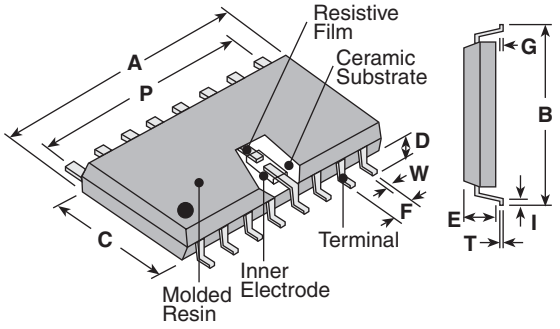
EU RoHS COMPLIANT



features

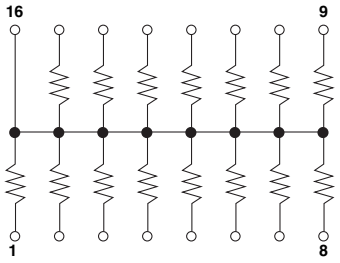
- Max. 15 resistor elements can be built in with a 1.27mm terminal pitch
- Low profile: 2.2mm or lower
- Improved mechanical strength and reliability by molding structure
- Marking: Black body color
- Products with lead-free terminations meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.

dimensions and construction

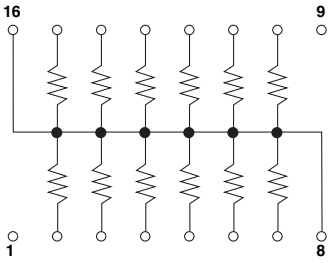


Size Code	Dimensions inches (mm)										
	A	B	C	D	E	F	G	I	T	P	W
MRGF16	.433±.008 (11.0±0.2)	.303±.008 (7.70±0.2)	.224±.008 (5.70±0.2)	.039±.004 (1.00±0.1)	.087 Max. (2.2 Max.)	.05±.008 (1.27±0.2)	.006±.002 (0.15±0.05)	.012 Min. (0.3 Min.)	.006±.0008 (0.15±0.02)	.350±.008 (8.89±0.2)	.016±.002 (0.4±0.05)

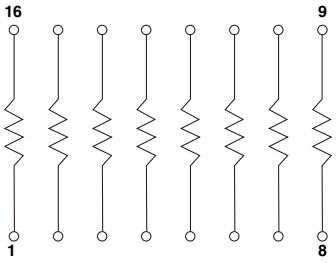
circuit schematic



X: 16 pins



D: 16 pins



W: 16 pins

ordering information

New Part #

MRGF16	W	T	TEB	102	J
Type	Package Symbol	Termination Material	Packaging	Nominal Resistance	Resistance Tolerance
	X W D	T: Sn	TEB: Embossed plastic ST: Stick	3 digits	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.

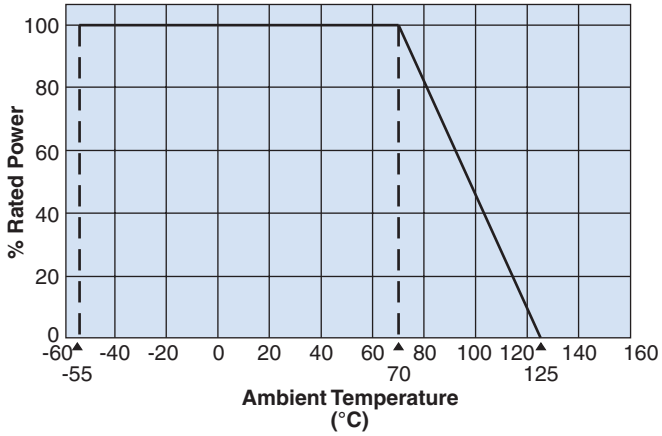
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applications and ratings

Part Designation	Power Rating @ 70°C w/element	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



For resistors operated at an ambient temperature of 70°C or above, a power rating shall be derated in accordance with the above derating curve.

Performance Characteristics

Parameter	Maximum Δ R ± (%+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 volume 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	2.0%	40°C±2°C, 90%~95% RH, 100h 1.5h ON/0.5h OFF cycle
Endurance at 70°C	2.0%	70°C±3°C, 1000h 1.5h ON/0.5h OFF cycle
High Temperature Exposure	3.0%	125°C±3°C, 1000h