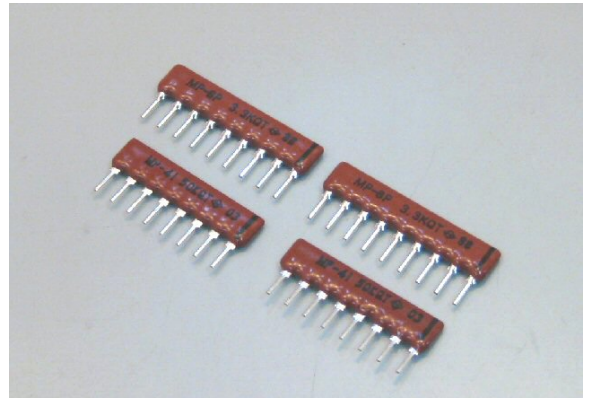


THROUGH-HOLE SIP RESISTOR NETWORKS

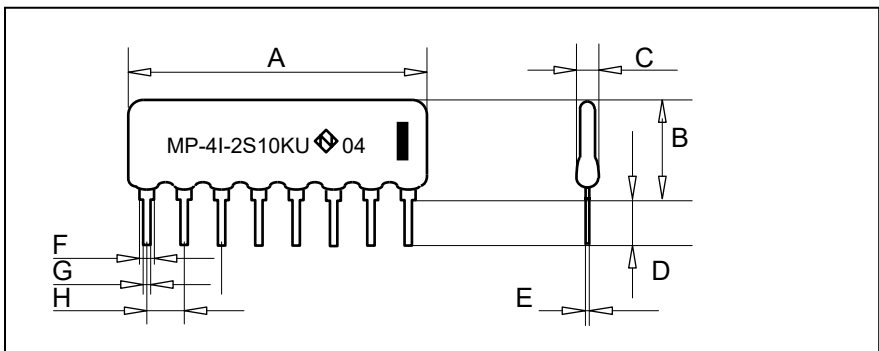
MP



Features and Applications

High precision through-hole SIP resistor networks made by NiCr thin film sputter on alumina substrates with high density patterning technologies.  
 5ppm-0.05% tight ratio tolerance and TC tracking are realized.  
 Individual (type I), series (type S) and parallel (P) circuit schematics are available.  
 2.5 mm width slim body and 7.5 mm height from PC board fit for high-density layout design.  
 Wide applications such as voltage dividers, feed back resistors for op amp, gain control circuit, termination of data transmission and voltage reference circuit, in data processing, data transmission, precision power sources of industrial controls, measurements, medical, measurements and automatic test systems.

Dimensions (mm) and Marking



■ : No.1 pin identification  
 MP-4I-2: Type  
 S: TCR and tracking  
 10K: Resistance  
 U: Tolerance and ratio  
 ◇: Manufacturer's ID  
 34: Date code  
 Note: When A is too small to print full characters, marking will be omitted style.

(mm)	4 pins	5 pins	6 pins	7 pins	8 pins	9 pins	10 pins
A	10.2+/-1.5	12.7+/-1.5	15.2+/-1.5	17.8+/-1.5	20.3+/-1.5	22.9+/-1.5	25.4+/-1.5
B	7.0 mm max.						
C	3.0 mm max.						
D	3.3 mm						
E	0.25 mm						
F	1.2 mm						
G	0.5 mm						
H	2.54 mm						

THROUGH-HOLE SIP RESISTOR NETWORKS

MP

Ordering Information

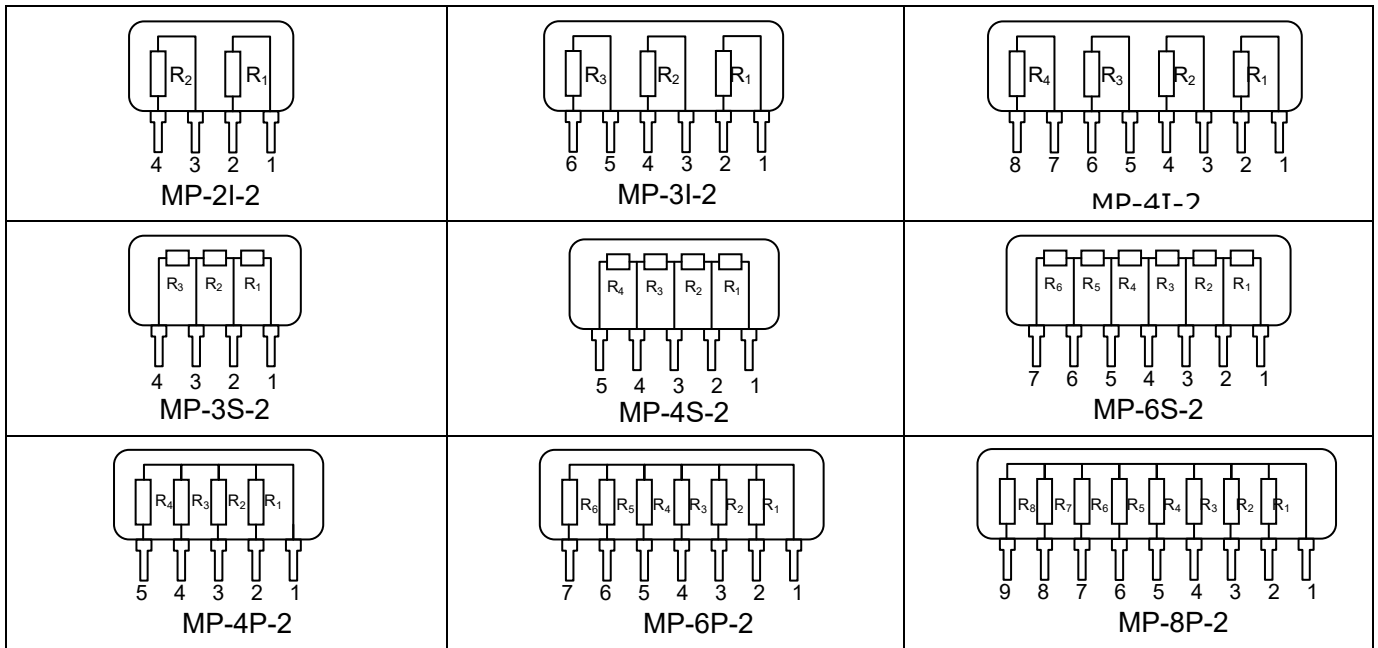
Model	TCR (abs-track)	Resistance	Tolerance (abs-ratio)	RoHS
MP-2I-2	A (100ppm-abs)	47R0-22K0	J (5.0%-abs)	Z00
MP-3I-2	C (50ppm-abs)		F (1.0%-abs)	
MP-4I-2	Z (5ppm-abs)		B (0.1%-abs)	
	R(5ppm-1ppm)		S(0.1%-0.05%)	
MP-3S-2	Q(10ppm-5ppm)		T(0.1%-0.1%)	
MP-4S-2	S(25ppm-5ppm)		U(0.5%-0.1%)	
MP-6S-2	L(50ppm-5ppm)		V(1.0%-0.1%)	
	P(50ppm-10ppm)		Y(1.0%-0.5%)	
MP-4P-2				
MP-6P-2				
MP-8P-2				

Resistance, TCR, Tolerance, Tracking and Ratio

Resistance	TCR Symbol	TCR		Tolerance Symbol	Tolerance	
		Absolute	Tracking		Absolute	Ratio
47 ohm – 22Kohm	R	+/- 5ppm	1ppm	S	+/-0.1%	+/-0.05%
	Q	+/-10ppm	5ppm	T	+/-0.1%	0.1%
	S	+/-25ppm	5ppm	U	+/-0.5%	0.1%
	L	+/-50ppm	5ppm	V	+/-1.0%	0.1%
	P	+/-50ppm	10ppm	Y	+/-1.0%	0.5%

Note1: Table shows a case of tracking and ratio, specify only absolute available.

Schematics



Specifications and Performance

	Specifications	Conditions
Rating Power	125mW	
Rated Ambient Temp.	70 deg C	
Operating temp. Range	-55 to +125 deg C	
Max. Applied Voltage	100V or Accordance with E=sqrt(PR)	
Short Time Overload	+/-0.1 % Abs	2.5 times rated power, 5seconds
Load Life	+/-0.1 % Abs	70C, 90min ON, 30min OFF, 1000hours
Humidity	+/-0.25 % Abs	60C, 90-95RH, DC 0.1W, 1,000hours
Soldering Heat	+/-0.1 % Abs	350C, 3seconds
Withstanding Voltage	+/-0.1 % Abs	1000VAC, 60seconds
Insulation Resistance	10,000Mohm	

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