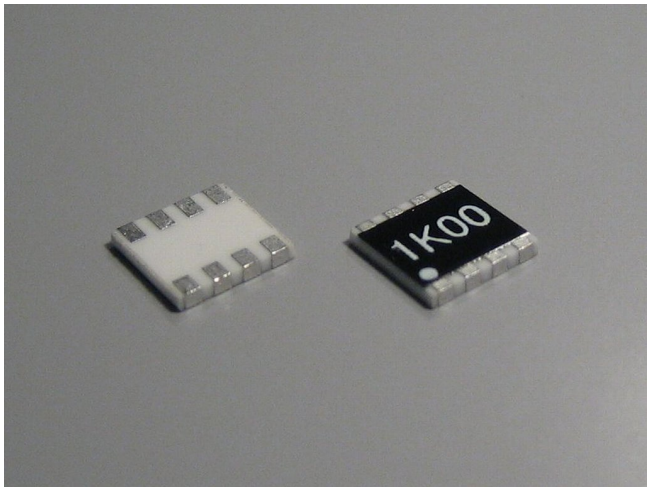
CHIP RESISTOR NETWORKS

SOIC TYPE

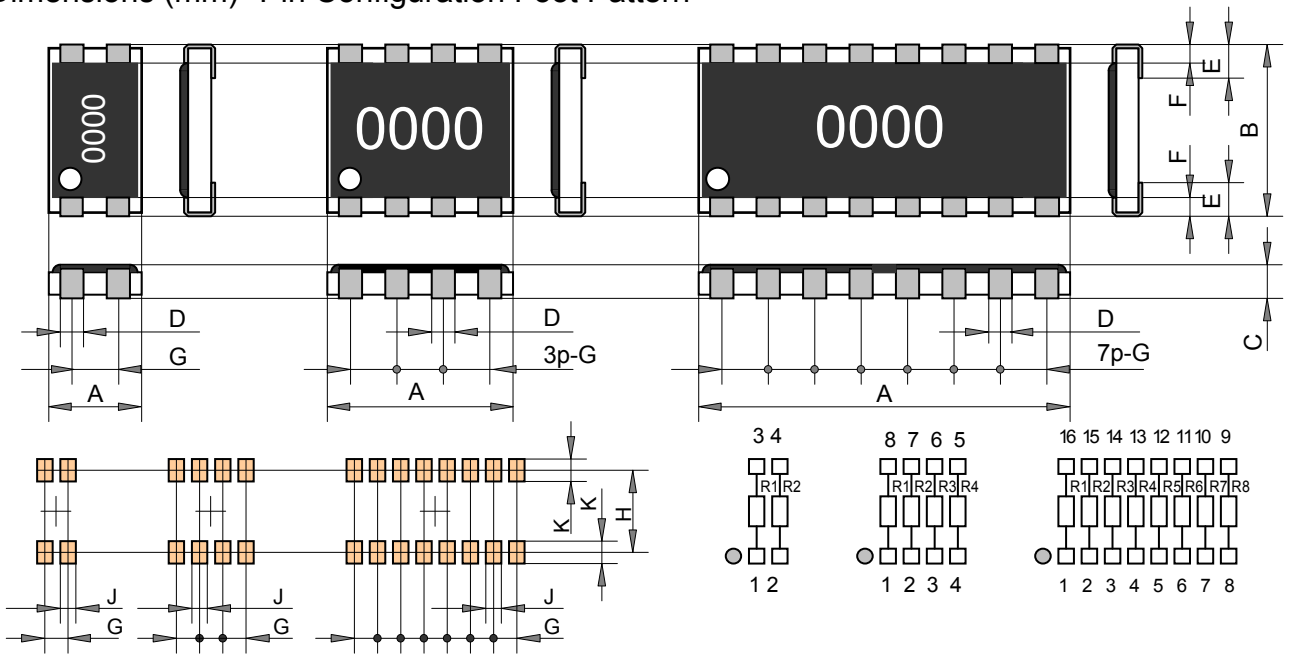
MCM4, MCM8, MCM16



Features and Applications

1ppm/C tracking and 0.01% ratio precision NiCr thin film resistor networks.
50mW/resistor rating sufficient power derating for 5 volt analog circuits.
Simple standard circuits for 8pin available to satisfy flexible circuit design requirements.
Supplied in plastic tape reel for automated assembling.
Custom designed circuits also available in 8pin configuration. Customer service will be advised.
Measurement, industrial electronics, industrial instruments, automatic testing, high-speed digital data transmission, intelligent hubs and routers, and data switching.

Dimensions (mm) Pin Configuration Foot Pattern



	A	B	C	D	E	F	G	H	J	K
MCM4	3.00	5.00	0.80	0.635	1.00	(0.5)	1.27	4.00	0.635	1.00
	+/-0.2	+/-0.1	+/-0.2	+/-0.1	+/-0.2		+/-0.1	-	+/-0.1	-
MCM8	5.00	5.00	0.80	0.635	1.00	(0.5)	1.27	4.00	0.635	1.00
	+/-0.2	+/-0.1	+/-0.2	+/-0.1	+/-0.2		+/-0.1	-	+/-0.1	-
MCM16	10.00	5.00	0.80	0.635	1.00	(0.5)	1.27	4.00	0.635	1.00
	+/-0.2	+/-0.1	+/-0.2	+/-0.1	+/-0.2		+/-0.1	-	+/-0.1	-

MCM4, MCM8, MCM16

Ordering Information

Type	TCR	Resistance	Tol.	Package
MCM8	T(5ppm-2ppm)	10kohm	Q(0.1%-0.01%)	Z00
MCM4	Z (5 ppm/C)	E24 & E96	A (0.05%)	Z00(Bulk)
MCM8	P (10ppm/C)			Z01(Tape)
MCM16	Q (5 ppm/C)		Q (0.01%)	
MCM4-00	R (1 ppm/C)		R (0.02%)	
MCM8-00	S (5 ppm/C)		S (0.05%)	
MCM16-00	T (2 ppm/C)		T (0.10%)	

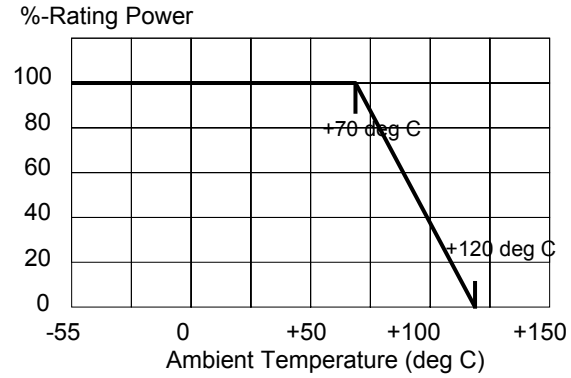
Note: When MCM8 T 10kohm Q Z00, R1=R2=R3=R4=10kohm Tracking 2ppm/deg C, matching: 0.01% at -20 deg C to +120 deg C

Matching Tracking Notation

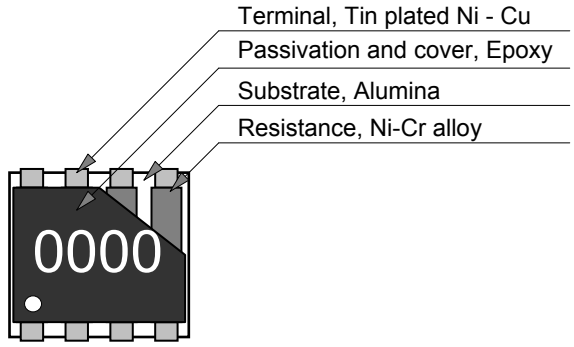
	TCR	Tracking
P	+/-50 ppm/deg C	10 ppm/deg C
Q	+/-10 ppm/deg C	5 ppm/deg C
R	+/-5 ppm/deg C	1 ppm/deg C
S	+/-25 ppm/deg C	5 ppm/deg C
T	+/-5 ppm/deg C	2 ppm/deg C

	Tolerance	Ratio
P	+/-0.05%	0.01%
Q	+/-0.1%	0.01%
R	+/-0.1%	0.02%
S	+/-0.1%	0.05%
T	+/-0.1%	0.10%

Derating



Material



Performances

Type	MCM	Note
Resistance Range (ohm)	100 ohm - 22Kohm	E24+ and E96
Standard Resistance	100ohm 1Kohm 10Kohm	Same resistance
TC-Absolute	+/-5ppm/deg C	-20 deg C to +120 deg C
TC-Tracking	+/-1ppm/deg C	-20 deg C to +120 deg C
Tolerance-Absolute	+/-0.05%	-20 deg C to +120 deg C
Tolerance-Matching	+/-0.01%	-20 deg C to +120 deg C
Rating Power/Resistor	50 mW	
Rating Power/Package	0.2 W	
Max. Operating Volt.	$\sqrt{P \cdot R}$ or 80 V	
Rating Temp.	+70℃	
Operating Temp. Range	-55 to +120 deg C	
Storage Temp. Range	-55 to +120 deg C	

Electrical Specifications

Items	Specifications	Conditions
Short Time Overload	+/-(0.05%) absolute	2.5 times rating power, 5 seconds
Insulation Resistance	>10,000Mohm	
Withstand Voltage	+/-(0.05%) absolute	100V, 60 seconds
Heat Shock	+/-(0.1%) absolute	5 cycles for temp. -65, +25, +125, +25 degC
Soldering Heat	+/-(0.05%) absolute	350 deg C, 3 seconds
Solder ability	Covered 95% area	230 deg C, 3 seconds
Solvent	No mechanical damage	
Humidity	+/-(0.1%) absolute	40 deg C, 90-95RH, DC 0.1W, 1000hours
Load Life	+/-(0.1%) absolute	70 deg C, 90min.ON, 30minOFF, 1000hours

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