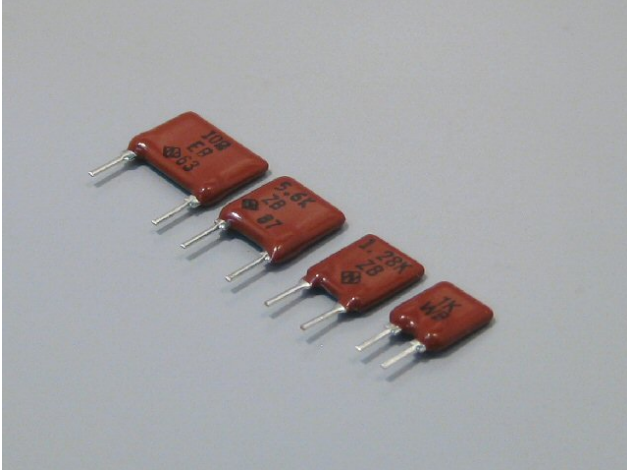


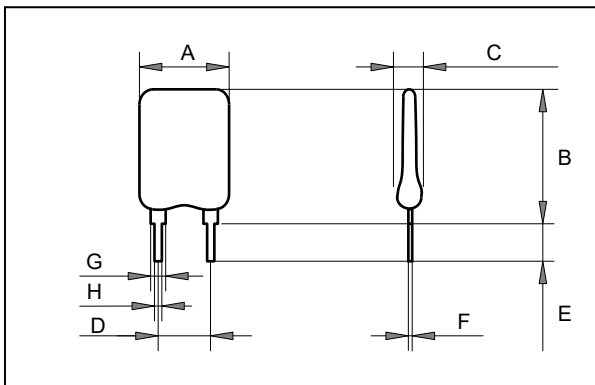
1/4W, Precision Thin Film Resistors  
 100mil-150mil-200mil-300mil-400mil pitch  
 RP-48, RP-47, RP-46, RP-45, RP-43



**Features and Applications**

High precision thin film resistors, typically 2ppm/°C TC made by Ni-Cr alloy spattered on alumina substrate, also 5ppm/°C and 0.05% is standard.  
 Wide operation temperature range covered from -55 to 125°C and absolutely linear (not bent) proportional dR vs. dT characteristics in the temperature range.  
 Sufficient rating power, long-term stability, low current noise, low voltage coefficient and low thermal EMF are provided.  
 Easy to install on precision electronics by leaded style, shorter delivery than another type precision resistors, free from matching and tracking calculation and economical.  
 Fit for discrete voltage divider and common analog circuit of professional audio, sensor pre-amplifier, industrial measurement, control, medical electronics, ATE, aerospace, reliable power electronics.

**Dimension (mm)**



(mm)	RP48	RP47	RP46	RP45	RP43
A	5.6max	6.8max	8.0max	10.16max	12.70max
B	8.2max	8.6max	9.0max	9.0max	9.0max
C	2.54max	2.54max	2.54max	2.54max	2.54max
D	2.54+/-0.25	3.81+/-0.25	5.08+/-0.25	7.62+/-0.25	10.16+/-0.25
E	3.3+/-0.5	3.3+/-0.5	3.3+/-0.5	3.3+/-0.5	3.3+/-0.5
F	0.25	0.25	0.25	0.25	0.25
G	1.2	1.2	1.2	1.2	1.2
H	0.5+/-0.05	0.5+/-0.05	0.5+/-0.05	0.5+/-0.05	0.5+/-0.05

**Ordering Information**

Type RP-46	TCR W	Resistance 2.61Kohm	Tolerance A	Option Code Z00	Note Terminal pitch
RP-43	Y (2.0ppm/°C)	See table	T(0.01%)	Z00 bulk	RP-43(10.16mm)
RP-45	W (2.5ppm/°C)		Q(0.02%)		RP-45(7.62mm)
RP-46	Z (5.0ppm/°C)		A(0.05%)		RP-46(5.08mm)
RP-47	N (10ppm/°C)		B(0.10%)		RP-47(3.81mm)
RP-48	E (25ppm/°C)		D(0.25%)		RP-48(2.54mm)

1/4W, Precision Thin Film Resistors RP-48, RP-47, RP-46, RP-45, RP-43

Specifications

Type	RP48, RP47					Notes
Resistance Range (Ω)	100-20K	100-150K	100-150 K	50-150K	10-150K	
Absolute TCR (+/-ppm/C)	1(X)(*)	2(Y), 2.5(W)	5(Z)	10(N)	25(E)	-55 to +125°C
Absolute Tolerance (+/-%)	0.01(T)(*)	0.02(Q)	0.05(A)	0.1(B)	0.1(B)	-55 to +125°C
Standard Resistance	E96** and E24**, include 2.5 and 5.0 / any resistance value*					
Rating Power (Watts)	0.25W					-55 to+70°C
Max Working Voltages (V)	$\sqrt{P \cdot R}$					

Type	RP46, RP45, RP43					Notes
Resistance Range (Ω)	100-20K	100-150K	100-150 K	50-510K	10-1M	
Absolute TCR (+/-ppm/C)	1(X)(*)	2(Y), 2.5(W)	5(Z)	10(N)	25(E)	-55 to +125°C
Absolute Tolerance (+/-%)	0.01(T)(*)	0.02(Q)	0.05(A)	0.1(B)	0.1(B)	-55 to +125°C
Standard Resistance	E96** and E24**, include 2.5 and 5.0 / any resistance value*					
Rating Power (Watts)	0.25W					-55 to+70 °C
Max Working Voltages (V)	$\sqrt{P \cdot R}$					

\* 4 or more significant resistance and odd resistance, please call factory about printing method..  
 Resistor, 1ppm/deg C-0.01% is optionally supplied attached with data one by one.

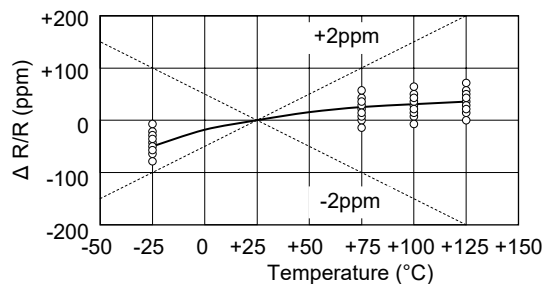
Performances

	Specification	Conditions and Note
Noise	< -45dB	
Voltage Coefficient	< 0.1ppm/V	THD at rating power < -140dB
Thermal EMF	0.05 uV/°C	
Temperature Cycle	+/-0.05%	-55 deg C30min, +120 deg C30min, 20cycles.
Short Time Over Load	+/-0.05%	Rating Power×2.5, 5seconds
Solder ability	Covered 95%	235 °C, 2seconds
Solvent	No damage	IPA test
Terminal Strength	+/-0.05%	
Withstanding Voltage	+/-0.03%	Old JIS C 5202 5.7. 500V-60seconds
Soldering Heat	+/-0.03%	350°C, 3seconds.
Vibration	Not specified	
Load Life	+/-0.05%	1000 hours
Humidity	+/-0.05%	1000 hours
Shelf Life Stability	+/-0.03%	One year at 25 °C
Operating Temp	-55 to +125°C	
Storage Temp. Range	-55 to +125°C	

TCR and Tolerance

TCR and Symbols		Tolerance and Symbols	
X	+/-1ppm/C	T	+/-0.01%
Y	+/-2ppm/C	Q	+/-0.02%
W	+/-2.5ppm/C	A	+/-0.05%
Z	+/-5ppm/C	B	+/-0.10%
E	+/-25ppm/C	B	+/-0.10%
C	+/-50ppm/C	F	+/-1.0%

Typical temperature depend



Resistance Value, E24+

1.0	1.1	1.2	1.3	1.5	1.6	1.8	2.0	2.2	2.4	2.5	2.7	3.0
3.3	3.6	3.9	4.3	4.7	5.0	5.1	5.6	6.2	6.8	7.5	8.2	9.1

Resistance Value, E96

1.00	1.21	1.47	1.78	2.15	2.61	3.16	3.83	4.64	5.62	6.81	8.25
1.02	1.24	1.50	1.82	2.21	2.67	3.24	3.92	4.75	5.76	6.98	8.45
1.05	1.27	1.54	1.87	2.26	2.74	3.32	4.02	4.87	5.90	7.15	8.66
1.07	1.30	1.58	1.91	2.32	2.80	3.40	4.12	4.99	6.04	7.32	8.87
1.10	1.33	1.62	1.96	2.37	2.87	3.48	4.22	5.11	6.19	7.50	9.09
1.13	1.37	1.65	2.00	2.43	2.94	3.57	4.32	5.23	6.34	7.68	9.31
1.15	1.40	1.69	2.05	2.49	3.01	3.65	4.42	5.36	6.49	7.87	9.53
1.18	1.43	1.74	2.10	2.55	3.09	3.74	4.53	5.49	6.65	8.06	9.76