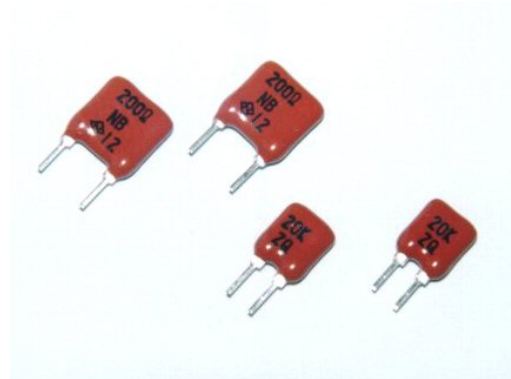


1/4W
PRECISION THIN FILM RESISTORS

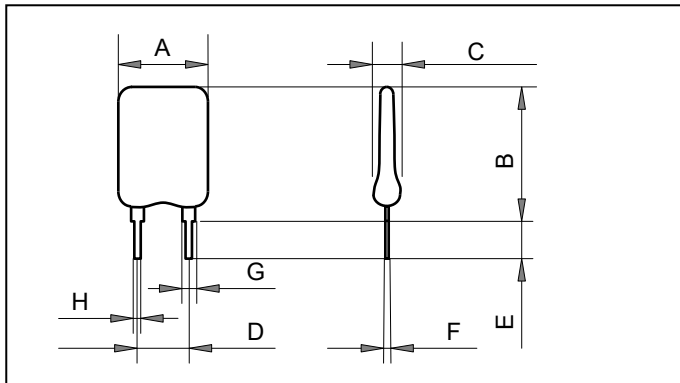
RP-480, RP-460



Features and Applications

Super precision thin film resistors, typically 1ppm/C TCR provide by Ni-Cr spatter process on alumina substrate, also 2ppm/°C and 0.02% is in 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.
 Silicone-epoxy coating presents sufficient long term stability
 Sufficient rating power, low current noise, low voltage coefficient and low thermal EMF are supplied.
 Easy to install on precision electronics by leaded style, shorter delivery than another precision resistors, free from matching and tracking calculation and economical.
 Fit for discrete voltage divider and common analog circuit of electronic scale, load cell measurement, DVM, control, medical electronics, ATE, aerospace, military applications.

Dimension (mm)



Type	RP480	RP460
A	5.6max	8.0max
B	8.2max	9.0max
C	3.0max	3.0max
D	2.54+/-0.25	5.08+/-0.25
E	3.3+/-0.5	3.3+/-0.5
F	0.25	0.25
G	1.2	1.2
H	0.5+/-0.05	0.5+/-0.05

Ordering Information

Type	TCR	Resistance	Tolerance	Packaging	Note
RP-480	W(2.5ppm/°C)	5K62	X	Z00	----
RP-480	Z (5ppm/°C)	E96 / E24+	A (0.05%)	Z00 (bulk)	----
RP-460	W(2.5ppm/°C)	E96 / E24+	X (0.01%)		

1/4W PRECISION THIN FILM RESISTORS

RP-480, RP-460

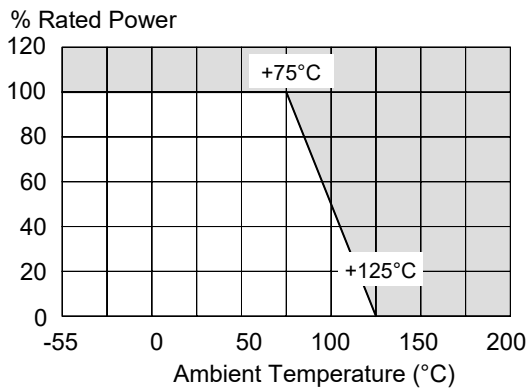
Specifications

Items	Specifications				Conditions
	RP-480		RP-460		
Type	RP-480		RP-460		
Resistance Range (ohm)	100-50 k	100-100k	100-50 k	100-100k	
Absolute TCR (ppm/°C)	+/-2.5 (W)	+/-5.0 (Z)	+/-2.5 (W)	+/-5.0 (Z)	-55 to +125°C
Absolute Tolerance (+/-%)	0.01(X)	0.05(A)	0.01(X)	0.05(A)	-55 to +125°C
Standard Resistance	E96 and E24, include 2.5 and 5.0		E96 and E24, include 2.5 and 5.0		
Rating Power	1/4 W		1/4 W		-55°C to +70°C
Max Working Voltages	100V		150V.		Under rating.

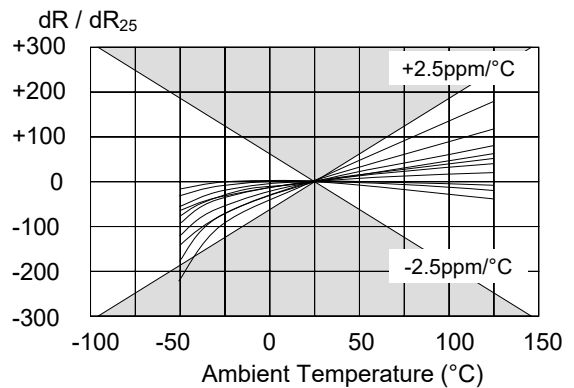
Performances

Items	Specifications	Typical	Conditions
Temperature Cycle	+/-0.05%	+/-0.01%	-55°C 30min, +120°C 30min, 20cycles.
Short Time Over Load	+/-0.05%	+/-0.0025%	Rating Power×2.5, 5seconds
Solder ability	Covered 95%	Covered 95%	235°C, 2seconds
Solvent	No damage	No damage	IPA
Terminal Strength	+/-0.05%	+/-0.0025%	
Withstanding Voltage	+/-0.03%	+/-0.0025%	
Soldering	+/-0.03%	+/-0.0025%	350°C, 3seconds.
Vibration	Not specified	Not specified	
Load Life	+/-0.05%	+/-0.05%	1000 hours
Humidity	+/-0.05%	+/-0.05%	1000 hours
Operating Temp.	-55 to +125°C	-55 to +125°C	
Storage Temp. Range	-55 to +75°C	-55 to +75°C	

Derating



Temperature Characteristics, Typical



Resistance Value, E24+

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

TCR and Tolerance Identifications

TCR and Symbols		Tolerance and Symbols	
W	+/-2.5ppm/C	T	+/-0.01%
Z	+/-5.0ppm/C	A	+/-0.05%

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