

Metal Film

Series UPR / UPSC

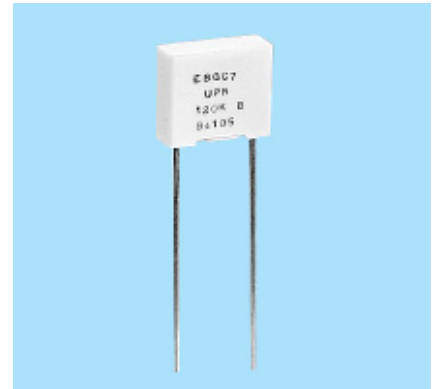
Extreme precise radial Resistors

- Precision Tolerances:
±0.1% is standard, and tolerances as close as ±0.01% are available
- Low Temperature Coefficient:
better than 3ppm/°C, 5ppm/°C, 10ppm/°C or 15ppm/°C
- Long-Term Stability:
better than ±0.05% per 2000 hours of operation.
- Wide Resistance Range:
from 10 Ohms to 255 KOhms

Specifications

- Resistance Tolerance:
±1.0% (tolerances to ±0.01% on special order)
- Std. Operating Temperature:
-55°C to + 85°C
- TC Temperature Range:
-20°C to + 85°C
- Overload:
6.25 times rated power for 5 seconds at voltage not to exceed 1.5 times maximum rated working voltage, ΔR less than 0.05%
- Load Life:
2000 hours at + 125°C, ΔR less than 0.05%
- Moisture Resistance:
Mil-Std-202, Method 106, ΔR less than 0.02%
- Thermal Shock:
Mil-Std-202, Method 107, Cond. B, ΔR less than 0.05%
- Isulation Resistance:
10,000 Megohms

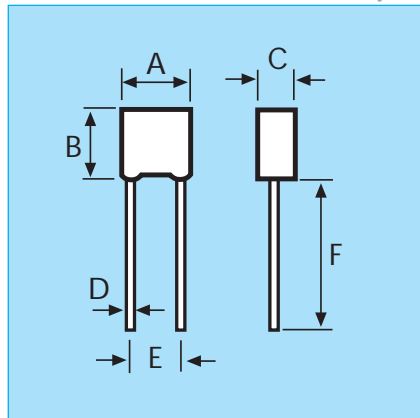
- Low Temperature Operation:
ΔR less than 0.02%
- Dielect. Withstanding Voltage:
ΔR less than 0.02%
- Vibration:
ΔR less than 0.01%
- Shock: ΔR less than 0.02%



Types UPSC and UPR Low TC Precision Radial-Lead Resistors - Standard Characteristics							
Model No.	Temperature Coefficient ppm/°C	Wattage +70°C	Max. Working Voltage	Dielect Strength	Resistance Min. Max.		Dimensions
UPSC	±3 to±15	0.60	300	300	100R	100K	see Matrix
UPR	±3 to±15	0.60	250	400	10R	255K	see Matrix

Dim.	UPSC	UPR
A	7.50±.20 (.295±.008)	10.50±.30 (.413±.012)
B	8.50±.20 (.335±.008)	9.00±.30 (.354±.012)
C	2.50±.20 (.098±.008)	4.00±.30 (.157±.012)
D	0.63±.05 (.025±.002)	0.63±.05 (.025±.002)
E	3.81±.38 (.150±.015)	7.62±.38 (.300±.015)
F	38.10±.50 (1.500±.197)	8.10±.50 (1.500±.197)

Dimensions in millimeters (inches)



TESTS	CONDITIONS	MIL-R-55182/9	TYPICAL DRIFTS
POWER CONDITIONING (108)	100 hours/rated power at + 125°C 90/30' cycle	-	±.02% combined test
THERMAL SHOCK (107)	5 cycles -65°C/+150°C	±.05%	combined tests
SHORT TIME OVERLOAD	6.25 times rated power/5sec	combined tests	
LOW TEMPERATURE STORAGE AND OPERATION	1h stor. 45 min rated pow. at -65°C 24 h stor. 45 min rated pow. at -65°C	±.05%	-
TERMINAL STRENGTH (211)	2lb pull test	±.02%	±.01%
DIELECTRIC WITHSTANDING VOLTAGE (301)	300 V ATMOSPHERIC 200 V/100,000 ft.	±.02%	±.01%
RESIST TO SOLDERING (210)	350°C/3 sec.	±.02%	±.01%
MOISTURE RESISTANCE (106)	10 days	±.05%	±.01%
SHOCK	10 shocks 100 g 6 ms sawtooth	±.01%	±.01%
VIBRATION (204)	10 to 2000 Hz. 20 g 8 hours	±.02%	±.01%
LOAD LIFE (108)	2000 hours at rated power at + 25°C, +85°C. or + 125°C	±.05%	±.05%
	10,000 hour at rated power at + 125°C	±.5%	±.2%
STORAGE LIFE	10,000 h. no load at room conditions	-	±.005%

In the above spec sheet, you will find our standard product, please contact your local manufacturing representative or call us direct to find out details of other options available regarding this style: