



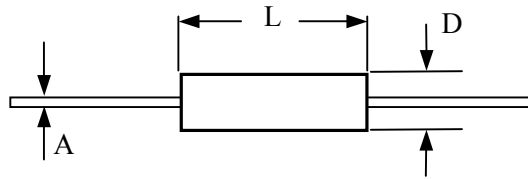
Precision Resistors

EE Series - Precision Metal Film Resistors / 精密金属膜电阻

o Token EE Series meets MIL-PRF-55182 and GJB244A-2001 quality standards.

• Moulding Type

- o High reliability
- o Excellent stability
- o High precision
- o Low temperature coefficient PPM.
- o Covers all general type resistors

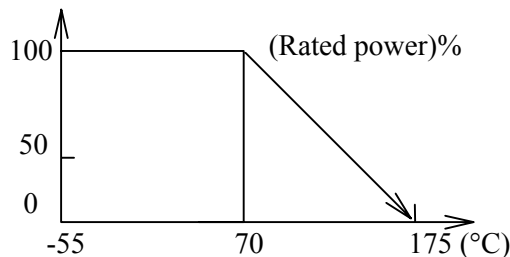


► Precision Metal Film Resistors Technical Characteristics

Type		EE1/20	EE1/10	EE1/8	EE1/4	EE1/2
Rated Wattage (W)	70 °C	0.125	0.25	0.5	0.75	1.0
	125 °C	0.05	0.10	0.125	0.25	0.5
Max. Working Voltage (V)		200	200	250	300	350
Dimensions (mm)	L ± 0.3	4.30	6.80	10.2	14.5	18.4
	D ± 0.4	1.90	2.50	3.80	4.50	6.50
	A ± 0.05	0.40	0.60	0.60	0.60	0.80
Resistance Range (Ω)		20 ~ 200K	10 ~ 3M	10 ~ 5M	10 ~ 10M	10 ~ 15M
Working Temperature Range		-55°C ~ +175°C				
Nominal Resistance Tolerance		B(±0.10%), C(±0.25%), D(±0.50%), F(±1.00%) between 5Ω to 3MΩ can be reached to A5(±0.05%) and A2(±0.02%)				
Temperature Coefficient PPM Normal test range(+25°C ~ +85°C) Special require range(-10°C ~ +50°C)		C6(±10PPM/°C), C5(±15PPM/°C), C3(±25PPM/°C), C2(±50PPM/°C) between 5Ω to 3MΩ can be reached to C7(±5PPM/°C)				

Remark • Please contact Token's Representatives if your requirement is not in above range.

► Power - Temperature Curve



► Precision Metal Film Resistors Periodical Inspection Items and Methods

Type	Item	Method	Requirement
Long Period	Life time	GJB244A (MIL-PRF-55182) 4.8.18 Rated Wattage, 125°C, 2000h 10000h	GJB244A (MIL-PRF-55182) 3.24 $\Delta R \leq \pm(0.5\%R + 0.01\Omega)$ $\Delta R \leq \pm(2\%R + 0.01\Omega)$
	Humidity	GJB244A (MIL-PRF-55182) 4.8.18 -10°C ~ +65°C, RH<90% Rated Wattage, Cycle 240h.	GJB244A (MIL-PRF-55182) 3.21 $\Delta R \leq \pm(0.4\%R + 0.01\Omega)$
	High temp exposed	GJB244A 4.8.19 175°C 2000h	GJB244A (MIL-PRF-55182) 3.25 $\Delta R \leq \pm(2.0\%R + 0.01\Omega)$
Short Period	Dielectric voltage	GJB244A (MIL-PRF-55182) 4.8.12/4.8.23/4.8.10	GJB244A (MIL-PRF-55182) 3.18/3.29/3.16 $\Delta R \leq \pm(0.15\%R + 0.01\Omega)$; no physical damage, arc, isolation break through
	Lead strength Impact High frequency vibration	GJB244A (MIL-PRF-55182) 4.8.11/4.8.16/4.8.17	GJB244A (MIL-PRF-55182) 3.17/3.22/3.23; $\Delta R \leq \pm(0.20\%R + 0.01\Omega)$ no physical damage
	Solderability	GJB244A (MIL-PRF-55182) 4.8.14	GJB244A (MIL-PRF-55182) 3.20; $\Delta R \leq \pm(0.10\%R + 0.01\Omega)$ no physical damage



Precision Resistors

► How to Order

- EE1/8 0.5W 10R B C6 P
1 **2** **3** **4** **5** **6**

1 Product type: EE1/20, EE1/10, EE1/8, EE1/4, EE1/2.

2 Rated Power (W)

Temperature	Rated Power (W)
70 °C	0.125
	0.250
	0.500
	0.750
	1.000
125 °C	0.050
	0.100
	0.125
	0.250
	0.500

3 Resistance Value (Ω): 20 ~ 200K, 10 ~ 3M, 10 ~ 5M, 10 ~ 10M, 10 ~ 15M.

4 Resistance Tolerance (%)

Code	Resistance Tolerance (%)
B	± 0.10
C	± 0.25
D	± 0.50
F	± 1.00

5 Temperature Coefficient (ppm/°C)

Code	Temperature Coefficient (ppm/°C)
C6	± 10
C5	± 15
C3	± 25
C2	± 50

6 Packaging: P (Bulk)