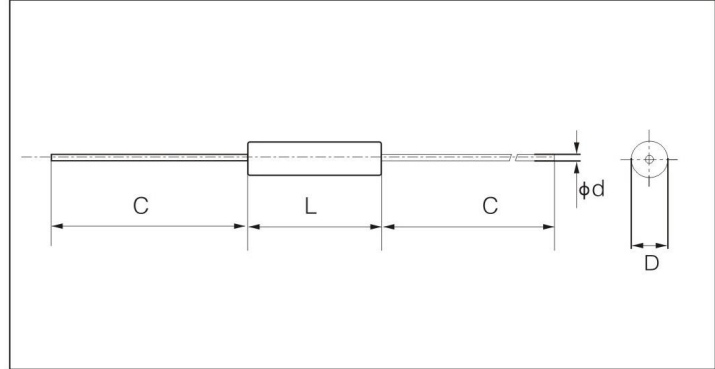


### Construction



### Characteristics

- High stability, high precision, moisture proof
- Measure up GJB1929-1994
- Temp. range : -65°C~175°C
- Stability: ±0.5% 125°C 1000h
- Mold style

### Application Area

EE type products have wide resistance range, high resistance accuracy, wide working temperature range, high humidity resistance, etc. They are widely used in various precision instruments, automation control, petroleum survey, precision scales, standard measuring instruments and so on.

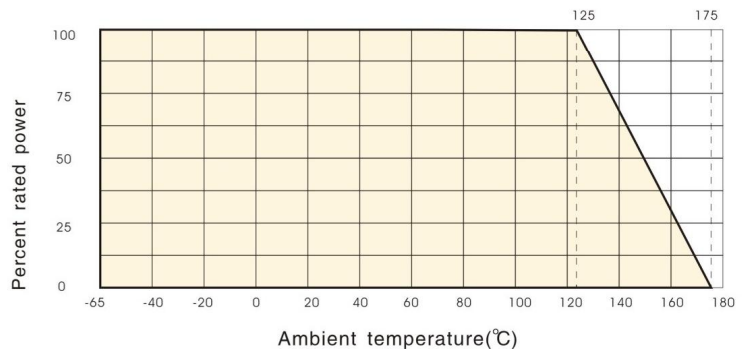
### Technical Standard

- GJB1929-1994 General Specification for High Stability Film Fixed Resistors
- Q/BDS20002-2003 EE Type High Stability Metal Film Fixed Resistors Detailed Specification
- ZZR-Q/BDS 20007-2007 RJ52 ( EE1/20 ) Type High Stability Metal Film Fixed Resistors Detailed Specification
- ZZR-O/BDS 20008-2007 RJ53 ( EE1/10 ) Type High Stability Metal Film Fixed Resistors Detailed Specification

### Dimensions ( mm )

size	L ± 0.3	D ± 0.3	C ± 2	d ± 0.05
EE1/20	3.9	1.8	26	0.50
EE1/10	7.0	2.5	35	0.60
EE1/8	10.0	3.4	35	0.60
EE1/4	14.8	5.2	35	0.60
EE1/2	18.3	6.5	35	0.80

### Derating Curve



### Technical Specifications

TYPE		EE1/20	EE1/10	EE1/8	EE1/4	EE1/2
TYPE OF GJB1929-1994		RJ52	RJ53	RJ54	RJ55	RJ56
Power Rating at tu°C(W)	70°C	0.067	0.125	0.250	0.500	0.750
	100°C	0.057	0.110	0.173	0.350	0.610
	125°C	0.050	0.100	0.125	0.250	0.500
Limiting Element Voltage (V)		200	200	250	300	350
Scope of Military Standard Certification	Resistance Range(Ω)	10 ~ 796K	10R ~ 2M	10 ~ 2M	10R ~ 3M	10R ~ 5M
	Tolerance Range	B ( ± 0.1% ), C ( ± 0.25% ), D ( ± 0.5% ), F ( ± 1.0% )				
	TC-Range (10 <sup>-6</sup> /K)	C3 ( ± 25 ), C2 ( ± 50 ), C1 ( ± 100 )				
Available Scope	Resistance Range(Ω)	10 ~ 1M5	0R1 ~ 5M	0R1 ~ 10M	0R1 ~ 5M	0R1 ~ 10M
	Tolerance Range	P ( ± 0.02% ), W ( ± 0.05% ), B ( ± 0.1% ), C ( ± 0.25% ), D ( ± 0.5% ), F ( ± 1.0% )				
	TC-Range (10 <sup>-6</sup> /K)	C7 ( ± 5 ), C6 ( ± 10 ), C5 ( ± 15 ), C4 ( ± 20 ), C3 ( ± 25 ), C2 ( ± 50 ), C1 ( ± 100 )				

1. The temperature coefficient of the products in the scope of military standard certification is the full temperature coefficient.
2. The temperature coefficient of non-military standard certified products is positive temperature coefficient, and the test point is 25°C ~ 85°C.



## ■ Performance

Test Item	Standards	Test Method
Short Time Overload	$\leq \pm (0.25\%R+0.05\Omega)$	2.5 times the rated voltage, the maximum voltage does not exceed 2 times the limit voltage, 5s
Temperature shock	$\leq \pm (0.25\%R+0.05\Omega)$	-65°C ~ 150°C, 5 cycles, 0.5h
Low temp. Operation	$\leq \pm (0.25\%R+0.05\Omega)$	-65°C, 1h, rated voltage not more than 200V, 45min
Dielectric Strength	$\leq \pm (0.25\%R+0.05\Omega)$	450V, 1min, 100v/s
Resistance to Solder	$\leq \pm (0.10\%R+0.05\Omega)$	350°C, 3s
Resistance to moisture	$\leq \pm (0.50\%R+0.05\Omega)$	-10°C ~ 65°C, RH80-98%, 240h
Load life	$\leq \pm (0.50\%R+0.05\Omega)$	125°C, Pe, 1000h
Shock	$\leq \pm (0.25\%R+0.05\Omega)$	980m/s <sup>2</sup> , 6ms
Vibration	$\leq \pm (0.25\%R+0.05\Omega)$	10 ~ 2000Hz, 0.75mm, 150m/s <sup>2</sup>

## ■ Electrical data-Tolerance, TCR & Resistance range

Type		EE1/20 RJ52	EE1/10 RJ53	EE1/8	EE1/4	EE1/2	
Code	Resistance Accuracy %	Resistance Range					
P	±0.02	FROM		10R	10R	300R	300R
		TO		500K	500K	1M0	1M0
W	±0.05	FROM	50R	10R	10R	50R	50R
		TO	750K	1M0	1M0	1M0	2M0
B	±0.1	FROM	10R	1R0	1R0	10R	10R
		TO	1M0	3M0	3M0	4M0	10M
C	±0.25	FROM	10R	1R0	1R0	1R0	1R0
		TO	1M0	5M0	10M	5M0	10M
D	±0.5	FROM	10R	0R5	0R5	0R5	0R5
		TO	1M0	5M0	10M	5M0	10M
F	±1.0	FROM	10R	0R1	0R1	0R1	0R1
		TO	1M5	5M0	10M	5M0	10M
Characteristic Code	Temperature Coefficient						
C7	±5(10 <sup>-6</sup> /K)	FROM		5R0	5R0	5R0	5R0
		TO		1M0	1M0	500K	500K
C6	±10(10 <sup>-6</sup> /K)	FROM	10R	1R0	1R0	1R0	1R0
		TO	750K	1M0	1M0	750K	750K
C5	±15(10 <sup>-6</sup> /K)	FROM	10R	1R0	1R0	1R0	1R0
		TO	1M0	4M0	5M0	3M0	5M0
C4	±20(10 <sup>-6</sup> /K)	FROM	10R	1R0	1R0	1R0	1R0
		TO	1M5	5M0	10M	5M0	10M
C3	±25(10 <sup>-6</sup> /K)	FROM	10R	1R0	1R0	1R0	1R0
		TO	1M5	5M0	10M	5M0	10M
C2	±50(10 <sup>-6</sup> /K)	FROM	10R	1R	1R	1R	1R
		TO	1M5	5M0	10M	5M0	10M

## ■ Examples for purchase

### Example

EE	1/20	0.067W	1M0	±0.5%	±50(10 <sup>-6</sup> /K)	Boxes
Type	Style	Power	Nominal Value	Tolerance	TCR	Packaging
EE	1 / 20 1 / 10 1 / 8 1 / 4 1 / 2	0.067W 0.125W 0.25W 0.5W 0.75W	1M0	±0.02% ±0.05% ±0.1% ±0.25% ±0.5% ±1.0%	±10(10 <sup>-6</sup> /K) ±15(10 <sup>-6</sup> /K) ±20(10 <sup>-6</sup> /K) ±25(10 <sup>-6</sup> /K) ±50(10 <sup>-6</sup> /K)	boxes

Packaging: Plastic recloseable bags (MOQ: 30pcs).