

■ Characteristics

- High stability, high precision, low TCR
- Temperature range: $-65^{\circ}\text{C} \sim 150^{\circ}\text{C}$
- Stability: $\pm 0.5\%$, 125°C , 1000h
- Coated style






■ Application Area

RE type resistors have wide resistance range, high accuracy, high stability, low temperature drift, small size, and are widely used in precision

■ Technical Standard

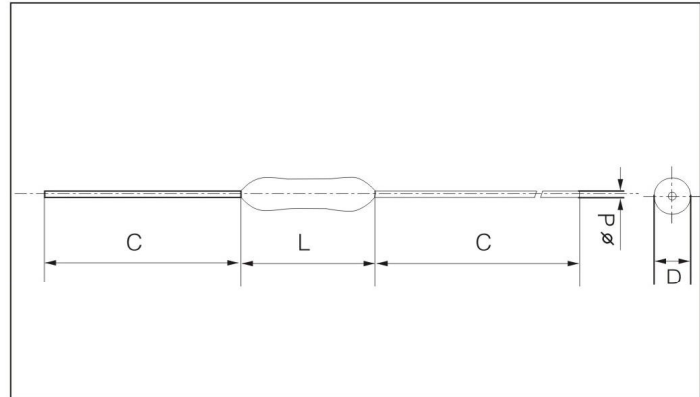
- GJB1929-1994 General Specification for High Stability Film Fixed Resistors
- Q/BDS 20005-2005 REType High Stability Metal Film Fixed Resistors Detailed Specification
- SJ 51929.4-1995 RJ52Type High Stability Metal Film Fixed Resistors Detailed Specification
- SJ 51929.5-1995 RJ53Type High Stability Metal Film Fixed Resistors Detailed Specification
- SJ 51929.6-1995 RJ54Type High Stability Metal Film Fixed Resistors Detailed Specification
- SJ 51929.7-1995 RJ55Type High Stability Metal Film Fixed Resistors Detailed Specification
- SJ 51929.8-1995 RJ56Type High Stability Metal Film Fixed Resistors Detailed Specification

■ Technical Specifications

TYPE		RE1/8	RE1/6	RE1/4	RE1/2	RE3/4
TYPE OF GJB1929-1994		RJ52 	RJ53 	RJ54 	RJ55 	RJ56 
Power Rating at $t_u^{\circ}\text{C}$ (W)	70 $^{\circ}\text{C}$	0.15	0.25	0.50	0.75	1.0
	100 $^{\circ}\text{C}$	0.10	0.15	0.25	0.50	0.75
	125 $^{\circ}\text{C}$	0.05	0.10	0.125	0.25	0.50
Limiting Element Voltage (V)		200	200	250	300	350
Scope of Military Standard Certification	Resistance Range (Ω)	10R ~ 796K	10R ~ 2M	10R ~ 2M	10R ~ 3M	10R ~ 3M
	Tolerance Range	B ($\pm 0.1\%$), C ($\pm 0.25\%$), D ($\pm 0.5\%$), F ($\pm 1.0\%$)				
	TC-Range ($10^{-6}/\text{K}$)	C3 (± 25), C2 (± 50), C1 (± 100)				
Available Scope	Resistance Range (Ω)	10R ~ 1M5	0R1 ~ 5M	0R1 ~ 10M	0R1 ~ 10M	0R1 ~ 10M
	Tolerance Range	P ($\pm 0.02\%$), W ($\pm 0.05\%$), B ($\pm 0.1\%$), C ($\pm 0.25\%$), D ($\pm 0.5\%$), F ($\pm 1.0\%$)				
	TC-Range ($10^{-6}/\text{K}$)	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 $25^{\circ}\text{C} \sim 85^{\circ}\text{C}$.

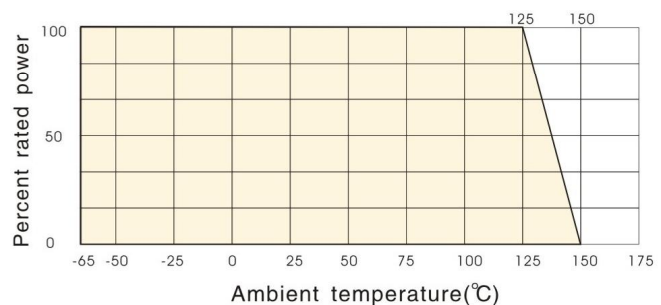
■ Construction



■ Dimensions (mm)

size	L ± 0.3	D ± 0.3	C ± 2	d ± 0.05
RE1/8	3.80	1.50	26	0.50
RE1/6	6.20	1.80	36	0.60
RE1/4	9.10	2.10	36	0.60
RE1/2	13.1	4.00	36	0.60
RE3/4	15.5	5.00	36	0.80

■ Derating Curve



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℃ ~ 150℃, 5 cycles, 0.5h
Low temp. Operation	$\leq \pm(0.25\%R+0.05\Omega)$	-65℃, 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℃, 3s
Resistance to moisture	$\leq \pm(0.50\%R+0.05\Omega)$	-10℃ ~ 65℃, RH80-98%, 240h
Load life	$\leq \pm(0.50\%R+0.05\Omega)$	125℃, Pe, 1000h
Shock	$\leq \pm(0.25\%R+0.05\Omega)$	980m/s ² , 6ms
Vibration	$\leq \pm(0.25\%R+0.05\Omega)$	10 ~ 2000Hz, 0.75mm, 150m/s ²

Electrical data-Tolerance, TCR & Resistance range

Type			RE1/8	RE1/6	RE1/4	RE1/2	RE3/4
			RJ52	RJ53	RJ54	RJ55	RJ56
Code	Resistance Accuracy %	Resistance Range					
P	±0.02	FROM		10R	10R	100R/300R	100R/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	1R0	1R0
		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 ⁻⁶ /K)	FROM		5R0	5R0	5R0	5R0
		TO		1M0	1M0	500K	500K
C6	±10(10 ⁻⁶ /K)	FROM	10R	1R0	1R0	1R0	1R0
		TO	750K	1M0	1M0	750K	750K
C5	±15(10 ⁻⁶ /K)	FROM	10R	1R0	1R0	1R0	1R0
		TO	1M0	4M0	5M0	3M0	5M0
C4	±20(10 ⁻⁶ /K)	FROM	10R	1R0	1R0	1R0	1R0
		TO	1M5	5M0	10M	5M0	10M
C3	±25(10 ⁻⁶ /K)	FROM	10R	1R0	1R0	1R0	1R0
		TO	1M5	5M0	10M	5M0	10M
C2	±50(10 ⁻⁶ /K)	FROM	10R	1R	1R	1R	1R
		TO	1M5	5M0	10M	5M0	10M

Examples for purchase

Example

RE	1/8	0.15W	10K	±0.05%	±20(10 ⁻⁶ /K)	Boxes
Type	Style	Power	Nominal Value	Tolerance	TCR	Packaging
RE	1/8 1/6 1/4 1/2 3/4	0.15W 0.25W 0.5W 0.75W 1W	10M	±0.02% ±0.05% ±0.1%	±5(10 ⁻⁶ /K) ±10(10 ⁻⁶ /K) ±15(10 ⁻⁶ /K) ±20(10 ⁻⁶ /K) ±25(10 ⁻⁶ /K) ±50(10 ⁻⁶ /K)	boxes

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