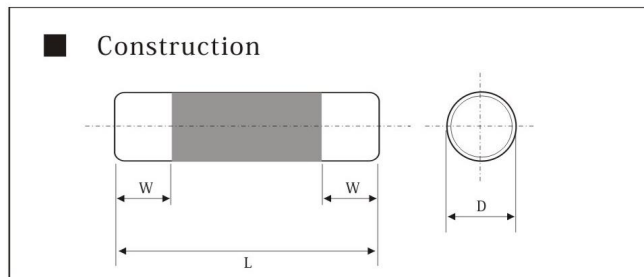


MELF^{3215/5918/8820} high precision metal film resistors



■ Characteristics

- Temp Range: -65°C ~ 150°C
- Stability: ±0.5% 125°C 1000h
- High Stability
- Low TCR
- Coated Style
- SMD

■ Technical Standard

- GJB1929-1994 General Specification for High Stability Film Fixed Resistors
- Q/BDS 20004-2003 Detailed Specification for MELF Type Column Mount Precision Metal Film Fixed Resistors
- ZZR(Z)-Q/BDS 20009-2008 Detailed Specification for RJ531/RJ541 (MELF5918/8820) Type Column Mounted High Stability Metal Film Fixed Resistors

■ Dimensions (mm)

TYPE	L ± 0.3	D ± 0.3	W ± 0.1
MELF3215	3.5	1.5	0.8
MELF5918	5.8	1.8	1.14
MELF8820	8.0	2.0	1.35

■ Application Area

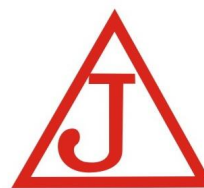
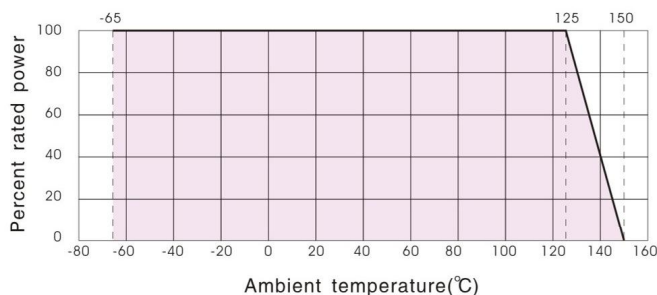
MELF3215 series products are widely used in hybrid circuits, digital meters, communication equipment, industrial control instruments and aerospace electronic equipment supporting the use of surface mount technology (SMT), easy and fast installation, the company's product technology is in a leading position in the domestic market, but also with the development and popularization of the whole assembly of surface mount technology (SMT), the field of application will become more and more extensive.

■ Technical Specifications

TYPE		MELF3215	MELF5918	MELF8820
TYPE OF GJB1929-1994		RJ521	RJ531	RJ541
Power Rating at tu°C(W)	70°C	0.15	0.25	0.5
	125°C	0.05	0.10	0.125
Limiting Element Voltage (V)		200	200	250
Scope of Military Standard Certification	Resistance Range (Ω)	10R ~ 500K	10R ~ 796K	10R ~ 2M
	Tolerance Range	B(±0.1%), C(±0.25%), D(±0.5%), F(±1.0%)		
	TC-Range (10 ⁻⁶ /K)	C3(±25), C2(±50), C1(±100)		
Available Scope	Resistance Range (Ω)	10R ~ 1M5	0R1 ~ 5M0	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 ⁻⁶ /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.

■ Derating Curve





Military electronic components quality certification conformity mark

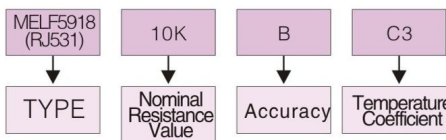
Performance Characteristics

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 ~ 150°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	$\leq \pm (0.25\%R + 0.05\Omega)$	260°C, 10s
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 ² , 6ms
Vibration	$\leq \pm (0.25\%R + 0.05\Omega)$	10 ~ 2000Hz, 0.75mm, 150m/s ²

Comparison table of available resistance ranges

TYPE			MELF3215 RJ 521	MELF5918 RJ 531 	MELF8820 RJ 541 
Code	Resistance Accuracy %	Resistance Range			
P	±0.02	FROM	-	10R	10R
		TO	-	500K	500K
W	±0.05	FROM	50R	10R	10R
		TO	796K	1M	1M
B	±0.1	FROM	10R	1R	1R
		TO	1M	3M	3M
C	±0.25	FROM	10R	1R	1R
		TO	1M	5M	10M
D	±0.5	FROM	10R	0R5	0R5
		TO	1M	5M	10M
F	±1.0	FROM	10R	0R1	0R1
		TO	1M5	5M	10M
Characteristic Code	Temperature Coefficient				
C7	±5	FROM	50R	5R	5R
		TO	796K	1M	1M
C6	±10	FROM	10R	1R	1R
		TO	796K	1M	1M
C5	±15	FROM	10R	1R	1R
		TO	1M	4M	5M
C4	±20	FROM	10R	1R	1R
		TO	1M5	5M	10M
C3	±25	FROM	10R	1R	1R
		TO	1M5	5M	10M
C2	±50	FROM	10R	1R	1R
		TO	1M5	5M	10M
C1	±100	FROM	10R	0R1	0R1
		TO	1M5	5M	10M

Examples for purchase



Packaging: Bulk in plastic bags
(MOQ:30pcs), 500pcs for taping.

Description:

1. Resistor resistance value, precision, temperature coefficient beyond the above control table can be supplied by agreement.
2. If the soldering iron is used to install the resistor. Soldering temperature should not exceed 260°C, and the soldering time should not exceed 5 seconds. The welding time should not exceed 5 seconds.
3. Once the installed resistor is removed, it cannot be reused.