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(RJM) Metal Film Ultra Precision Melf Resistors

Token Electronics Industry Co., Ltd.

Taiwan: No.137, Sec. 1, Zhongxing Rd., Wugu District,
New Taipei City, Taiwan, R.O.C. 24872
Tel: +886 2981 0109 Fax: +886 2988 7487

China: 12F, Zhong Xing Industry Bld., Chuang Ye Road,
Nan Shan District, Shen Zhen City,
Guang Dong, China 518054
Tel: +86 755 26055363; Fax: +86 755 26055365

Web: www.token.com.tw

Email: rfq@token.com.tw

Product Introduction

Token Precision Metal-Film Melf Resistors (RJM) offer more design options.

Features :

- DIN: 0102, 0204, 0207, 0411.
- Pure Sn termination on Ni barrier layer.
- Very high ratio of performance to price.
- High precision tolerance down to ± 0.05 %.
- Force fitted steel caps, tin plated on nickel barrier.
- Superior overall stability, most advanced thin film technology.
- TCR down to ± 5ppm/℃, wide resistance range: 0.1Ω to 22MΩ.
- Compatible with lead (Pb)-free and lead containing soldering processes.

Applications :

- Measuring and calibration equipment.
- Industrial process control systems.
- Space and aircraft electronics.
- Test and measurement.
- Medical electronics.
- Telecom.

(RJM) professional thin film MELF resistors (Cylindrical Resistors) are the perfect choice for most fields of modern professional electronics where reliability and stability is of major concern.

(RJM) resistors combine the proven reliability of professional MELF products with a most advanced level of precision and stability first achieved with axial thin film high precision resistors.

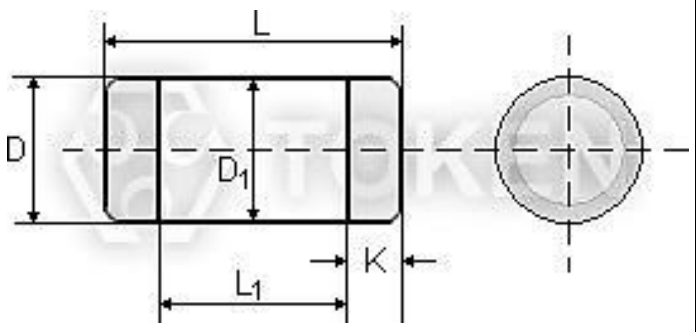
This unique combination makes the product perfectly suited for all applications with outstanding requirements towards reliable precision and stability. The typical applications in the fields of telecommunication, automotive and medical equipment reflect the outstanding level of proven reliability.

Token's (RJM) equate Vishay, Ohmite, Caddock, IRC, EBG, KOA, Panasonic Precision MELF with more competitive price and fast delivery. Contact us with your specific needs. Please link to Token official website "Melf Resistors" for more information.

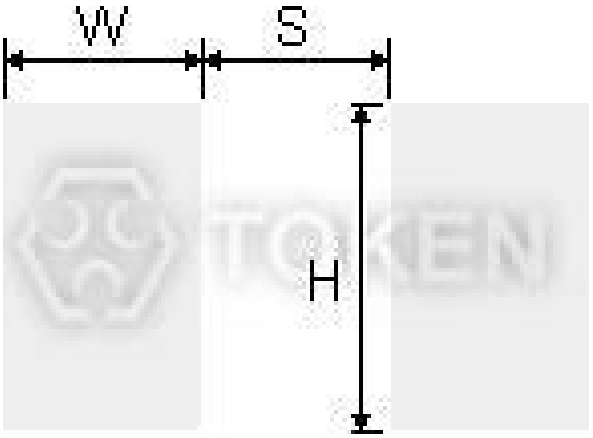
Dimensions

Dimensions & Recommended Soldering Bath Dimensions (RJM)

Type		RJM72P	RJM73S	RJM73P	RJM74S	RJM74P	RJM16M	RJM17M	RJM18M
Metric type		DIN: 0102	DIN: 0204		DIN: 0207			DIN: 0411	
Dimension (Unit: mm)	L(±0.3)	2.2	3.5		5.7		6.0	8.7	11.8
	L1(±0.3)	1.0	1.6		2.9		3.3	4.9	8.1
	D(±0.3)	1.3	1.3		2.1		2.1	3.1	3.6
	K(±0.2)	0.4	0.8		1.3		1.3	1.8	1.8
	D1(±0.1)	D+0/D-0.15	D+0/D-0.25		D+0/D-0.5		D+0/D-0.5	D+0/D-0.5	D+0/D-0.5
Recommended Soldering Bath Dimensions (Unit: mm)	S	1.0	1.6		2.6		2.8	5.6	8.2
	W	2.0	2.5		2.5		2.8	3.2	4.0
	H	2.0	2.5		2.5		2.8	3.8	4.5



Precision Melf (RJM) Dimensions



Recommended Soldering Bath (RJM) Dimensions

Characteristics

Characteristics (RJM)

Type	RJM72P	RJM73S	RJM73P	RJM74S	RJM74P	RJM16M	RJM17M	RJM18M
Metric type	DIN: 0102	DIN: 0204		DIN: 0207			DIN: 0411	
Rated dissipation P70	0.125W	0.125W	0.25W	0.25W	0.50W	1.0W	2.0W	3.0W
Resistance range (Ω)	10 ~ 1M	0.1 ~ 10M		0.1 ~ 22M			0.1 ~ 22M	
Resistance tolerance (%)	J (±5); F (±1); D (±0.5); C (±0.25); B (±0.10); A5 (±0.05)							
Temperature coefficient (ppm/℃)	C1 (±100); C2 (±50); C3 (±25); C5(±15); C6 (±10); C7 (±5)							
Climatic category (LCT/UCT/days)	55 / 125 / 56							
Operating voltage U_{max}	200V	200V	250V	250V	300V	350V	400V	450V
Temperature range	-55℃ to 125℃							
Insulation voltage (V)	300	300	300	300	600	700	800	900
Insulation resistance	>1GΩ							

- **Notice: Resistance out of range, tolerance and temperature coefficient match are under request. RJM72 is still in trial production.**

Order Codes

Order Codes (RJM)

RJM74P	10R	D	C6	P

Part Number
RJM72P
RJM73S
RJM73P
RJM74S
RJM74P
RJM16M
RJM17M
RJM18M

Resistance Value (Ω)	
0R1	0.1Ω
10R	10Ω
100R	100Ω
1K	1KΩ
10K	10KΩ
100K	100KΩ
1M	1MΩ
10M	10MΩ

Resistance Tolerance (%)	
J	±5%
F	±1%
D	±0.5%
C	±0.25%
B	±0.10%
A5	±0.05%

Temperature coefficient (PPM/℃)	
C1	±100ppm/℃
C2	±50ppm/℃
C3	±25ppm/℃
C5	±15ppm/℃
C6	±10ppm/℃
C7	±5ppm/℃

Package	
P	Bulk
TR	Taping Reel

General Information

Token MELF Offers Designer a Greater Choice

Token Electronics is now offering the complete range of MELF products, comprising DIN-0411, DIN-0309, DIN-0207, DIN-0204 and DIN-0102. This high stability, close-tolerance MELF resistors have a footprint very close to comparable chip resistors but maintain their tolerance and deliver higher stability over a wider temperature range.

Where applications require even tighter tolerance, Token offer Ultra Precision range in the RJM package, with values from 0.1Ω ~ 22MΩ, tolerance from ±5% down to as low as ±0.05% and TC from ±50ppm/℃ to ±5ppm/℃.

For high pulse load and high-frequency applications, Token Electronics offer specialized MELF resistor. The high pulse load resistors are metal glaze film RGM, available in values from 50KΩ ~ 22MΩ and ±0.5% precision tolerance, for 0.125 W ~ 3W applications.

High-frequency RFM resistors are available for RF microwave applications where impedance change due to the parasitic inductance of regular resistors is not acceptable.

Chip Resistor Alternatives

In very low resistance values, between 0.1Ω and 475Ω, not usually offered by conventional chip resistors, these are available in RJM72P 0102, RJM73P 0204, RJM74P 0207 and standard RJM18M 0411 MELF precision packages.

All MELF-type resistors are available on blister tape for automated placement and maintain their high stability, high precision characteristics when exposed to soldering temperatures and operating stresses including moisture, vibration, humidity and temperature variation within the specified range.

This makes them suitable for a wide range of applications, from laboratory and prototyping work to installation in hostile environments such as airframe or under-bonnet areas, exposed parts of vehicles, or other places where electronic sensing and controls must be installed.