

High Frequency Non-Inductance Melf Resistors

Non-Inductance MELF Offer Greater Choice for High Frequency Applications

▶ Preview

The RFM speciality series of high frequency non-inductance MELF resistor from Token Electronics has been extended to offer more than GHz operation, making the devices more suitable for high frequency RF applications.

They are the perfect choice in high frequency circuit designs where the parasitic inductance of regular, helical trimmed resistors can not be accepted, but where also pulse energies apply. Typical applications are in the fields of telecommunication equipment and industrial electronics.

These high stability, non-inductance MELF resistors have a footprint very close to comparable chip resistors but maintain their tolerance and deliver higher stability over a wider temperature range. Sizes range from 5.7 x 2.1mm for the RFM74 MELF-0207, through 3.45 x 1.3mm for the RFM73 MELF-0204 down to 2.2 x 1.3mm for the RFM72 MELF-0102.

Production is strictly controlled and follows an extensive set of instructions established for reproducibility. The groove on the metal alloy film of high grade ceramic rod is special designed to achieve non inductance. The resistor elements are covered by a protective coating designed for mechanical, electrical and climatic protection.

The terminations are covered with a final pure tin plating for keeping perfect solderability. Four or five color code rings designate the resistance value and tolerance in accordance with IEC 60062.

Token's RFM MELF standard series can be a replacement for Vishay, IRC, EBG, KAO, Panasonic Precision Devices with more competitive price and short lead time. Contact us with your specific needs.

▶ Features

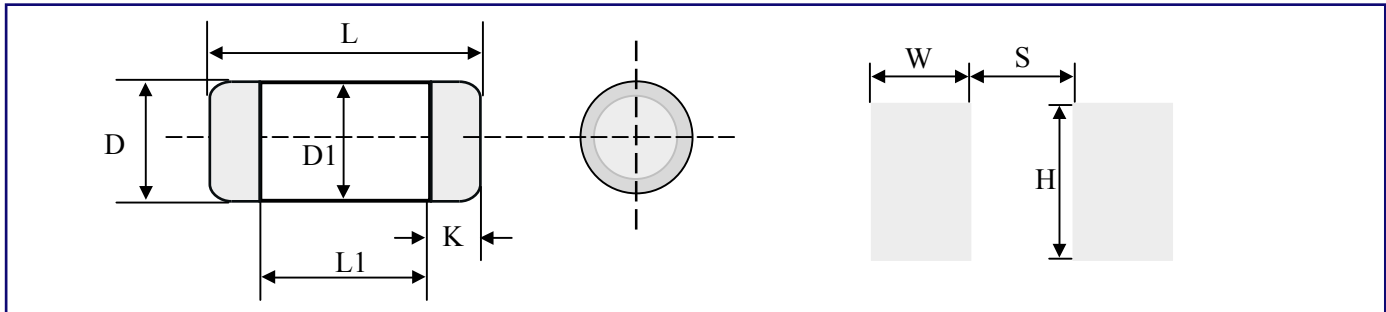
- Lead (Pb)-free and RoHS compliant.
- Power dissipation rating at 70°C up to 0.75W.
- Low-inductance non-helical trimmed product.
- Special metal film technology, DIN: 0102, 0204, 0207.
- Tolerance range: $\pm 0.5\%$ to $\pm 5.0\%$; Resistance range: 25Ω to 200Ω .
- Suitable for more than GHz operation; Excellent overall stability: Class 0.5.



▶ Applications :

- Medical Equipment.
- Industrial electronics.
- Automatic Equipment Controller.
- Communication Device, Cell phone, GPS, PDA.
- HF and pulse loading applications.
- Testing & Measurement Equipment.
- Consumer Product, Printer Equipment.

► Dimensions & Recommended Soldering Bath Dimensions

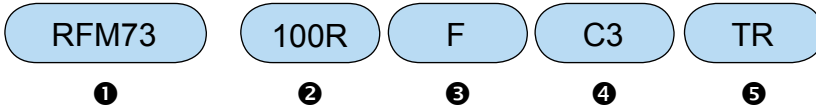


Type		RFM72	RFM73	RFM74	RFM75
Metric sizes		DIN: 0102	DIN: 0204	DIN: 0207	DIN: 0207
Dimension (mm)	L±0.2	2.2	3.45	5.7	6.0
	L1±0.2	1.2	1.6	3.0	3.3
	D±0.2	1.3	1.3	2.1	2.1
	K±0.1	0.4	0.8 min	1.2 min	1.2 min
	D1±0.1	D+0/D-0.15	D+0/D-0.25	D+0/D-0.3	D+0/D-0.3
Soldering bath (recommended) (mm)	S	1.0	1.6	2.6	2.8
	W	2.0	2.0	2.5	2.5
	H	2.0	2.5	2.5	2.5

► Characteristics

Type	RFM72	RFM73	RFM74	RFM75
Metric sizes	DIN: 0102	DIN: 0204	DIN: 0207	DIN: 0207
Resistance range	25Ω ~ 200Ω			
Operating Temperature range	-55°C ~ 125°C			
Resistance Tolerance (%)	D(±0.5); F(±1.0); J(±5.0)			
Temperature coefficient (PPM/°C)	C1(±100); C2(±50); C3(±25); C5(±15); C6(±10)			
Rated dissipation (W) P ₇₀	0.125	0.25	0.5	0.75
Operating mode	standard	standard	standard	power
Climatic category (LCT/UCT/days)	55/125/56	55/125/56	55/155/56	55/155/56
Endurance, Max, resistance change at P70, ΔR/R max., after 1000h	≤0.5% for Tol.=±1% & ≤1% for Tol.=±5%			
Derating	standard type linear from 70°C to 125°C			
Insulation voltage	500V			
Insulation resistance	>1GΩ			

▶ How to Order



① Product type: RFM72, RFM73, RFM74, RFM75

② Resistance Value (Ω):

Code	Resistance Value
100R	100 Ω

③ Resistance Tolerance (%)

Code	Resistance Tolerance (%)
D	± 0.5
F	± 1.0
J	± 5.0

④ Temperature coefficient (PPM/ $^{\circ}$ C)

Code	Temperature coefficient (PPM/ $^{\circ}$ C)
C1	± 100 ppm/ $^{\circ}$ C
C2	± 50 ppm/ $^{\circ}$ C
C3	± 25 ppm/ $^{\circ}$ C
C5	± 15 ppm/ $^{\circ}$ C
C6	± 10 ppm/ $^{\circ}$ C

⑤ Packaging

Codes	Packaging
TR	Taping Reel
P	Bulk

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