

Resistors

Precision - Metal Foil Resistors

MFL - series



- Very good Long Term Stability
- Any Resistance from 10Ω - 200kΩ
- Best Resistance Tolerance 0,05%
- Temperature Coefficient ±2,5 ppm/K
- Non - Inductance
- Low Current Noise

Specification	MFL501	MFL502	MFL503
Resistance Range (Ω)	1 -100k	1 - 150k	5 - 200k
Power Rating (Watts)	0,125	0,25	0,25
Operating Voltage (V)	250 (max.)	250 (max.)	300 (max.)
Tolerances (%)		10Ω - 30Ω: ±0,5; ±1 30Ω - 100Ω: ±0,1; ±0,5; ±1 100Ω - 200k: ±0,05; ±0,1; ±0,5; ±1	
Temperature Coefficient		2,5ppm; 5ppm	

Mechanical Data

Resistance Element	Metal Foil, special Alloy
Carrier	Steatit
Housing	Epoxy Coated
Leads	Tin plated Copper

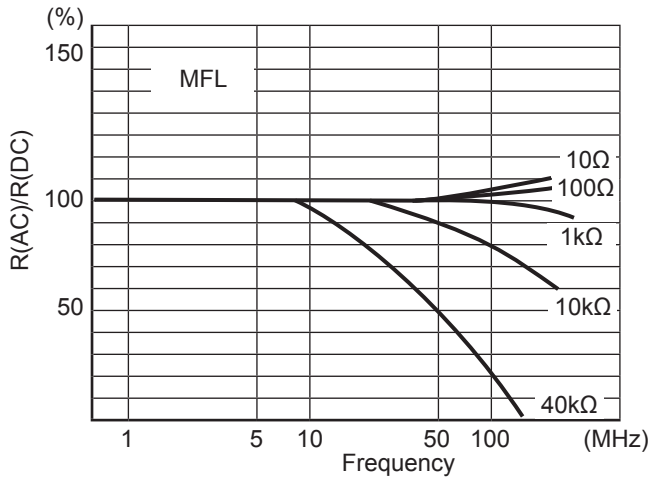
Parameter	Test	
Operating Temperature Range		-25°C to 155°C
Thermal Shock	-25°C/30 min., 25°C/5min.+155°C/30 min., 5 Cycles	±0,005%
Short Time Overload	2,5x Related Power, 5 sec.	±0,005%
Solderability	235°C, 2 sec.	Covered > 95%
Soldering Heat Resistance	350°C, 3 sec.	±0,0025%
Insulation Resistance	100 VDC, 1 min.	> 10000 MΩ
Shock	50G, 11ms, Half-Sine Wave, X, Y, Z, 3x	±0,0025%
Vibration, High Frequency	20G, 10Hz-55Hz-10Hz, 20 min., X, Y, Z, je 4h	±0,0025%
Stability	Related Power at 70°C, 1,5h ON, 0,5h OFF, 1000h	±0,005% (typically)
Storage Life	15 - 35°C, 15 - 75% RH, Loadfree, 10.000h	±0,0025%
Current Noise		-42dB

Resistors

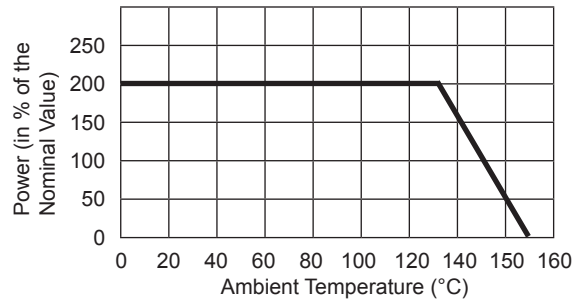
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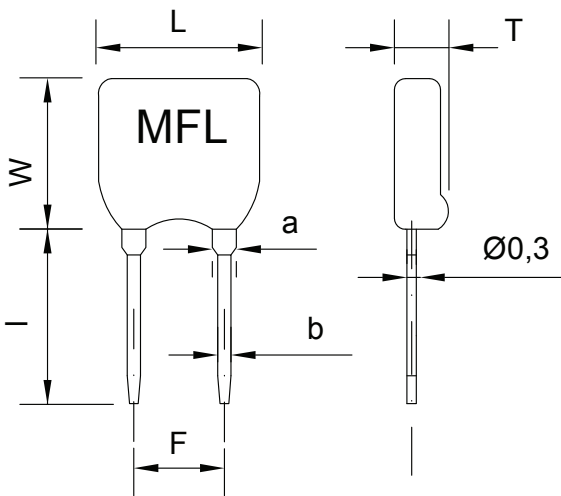
Frequency Characteristics



Power Derating Curve



Technical Drawing



	L (±0,5)	W (±0,5)	I (±1)	T (±5)	F (±0,2)	a (±0,05)	b (±0,05)
MFL501	5,6	6,2	5,0	2,2	2,54	1,0	0,65
MFL502	5,6	6,2	5,0	2,2	2,54	1,0	0,65
MFL503	7,5	6,2	5,0	2,2	5,08	1,0	0,65

All Dimensions in mm

Ordering Information

MFL501
Type

W0,1%

Resistance Tolerance
 10Ω - 30Ω: ±0,5; ±1
 30Ω - 100Ω: ±0,1; ±0,5; ±1
 100Ω - 200k: ±0,05; ±0,1; 0,5; ±1

TK5
Temperature Coefficient
 ±2,5ppm; ±5ppm

10k000
Resistance Value
 (1Ω - 200kΩ)