SMT WIREWOUND RESISTORS

MW SERIES - 1/2W to 5W

RoHS Sn/Pb SWIFT™

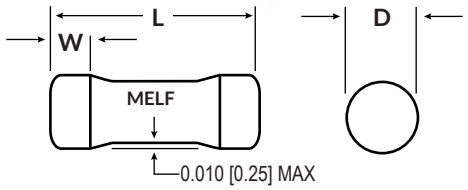
FEATURES

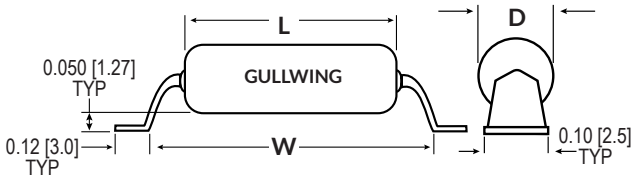
- Inherent wirewound stability and overload capability
- Resistance range: 0.005Ω to 50KΩ
- Excellent TC stability (available to ±5ppm/°C)
- Standard tolerance: ±1% or ±5% (available to 0.010%)

OPTIONS

- ***Opt. X***: Non-inductive
- ***Opt. T***: PTC Temperature Sensitive (+80ppm/°C to +6000ppm/°C)
- ***Opt. P***: Increased Pulse Capability
- ***Opt. F***: Flameproof (UL94V-0)
- ***Opt. ER***: 100 Hour Burn-in
- ***Other***: Special Marking, matched sets, Hi-Rel screening, low therm EMF, etc.

RCD MW Series provide a cost-effective solution for demanding applications. Advantages include superior surge capability, improved temperature stability, moisture resistance, noise, and a significant space and cost savings over molded models. MW3 & MW5 feature compliant gullwing terminals, which act as standoffs to reduce PCB temperature and help minimize TCE stress (utilize compliant terminals in applications with wide temperature gradients).





RCD TYPE	PKG STYLE	WATTAGE @ 25°C (W)	WATTAGE DERATING ABOVE 25°C (mW/°C)	MAXIMUM VOLTAGE [1] (V)	DIELECTRIC STRENGTH [2] (V)	RESISTANCE RANGE [2]	DIMENSIONS In [mm]		
							L	W	D
MW1/2	MELF	0.50	3.85	30	200	0.50Ω - 500Ω	0.180±0.020 [4.57±0.50]	0.020 [0.50] MIN	0.064±0.010 [1.63±0.25]
MW1	MELF	1.00	7.70	40	250	0.050Ω - 1KΩ	0.250±0.020 [6.35±0.50]	0.020 [0.50] MIN	0.085±.010 [2.16±0.25]
MW2	MELF	2.00	15.40	60	250	0.050Ω - 2KΩ	0.350±0.020 [8.89±0.50]	0.024 [0.60] MIN	0.125±0.010 [3.18±0.25]
MW25	MELF	2.50	19.20	100	300	0.050Ω - 5KΩ	0.415±0.020 [10.54±0.50]	0.032 [0.80] MIN	0.144±.010 [3.66±0.25]
MW35	MELF	3.00	23.10	200	400	0.050Ω - 10KΩ	0.500±0.024 [12.7±0.60]	0.040 [1.0] MIN	0.169±.010 [4.3±0.25]
MW3	GULLWING	3.00	23.10	200	500	0.005Ω - 25KΩ	0.485±0.040 [12.3±1.0]	0.650±0.040 [16.5±1.0]	0.165±0.030 [4.19±0.76]
MW5	GULLWING	5.00	37.00	250	500	0.005Ω - 50KΩ	0.530±0.060 [13.5±1.5]	0.715±0.040 [18.2±1.0]	0.180±0.035 [4.57±0.89]

[1] Voltage determined E = √(PxR), E not to exceed maximum voltage rating. Increased ratings available. Multiply by 0.70 for ***Opt. X***.
[2] Increased range available.

SPECIFICATIONS

Resistance Range	Available Tolerances	Temperature Coefficient (ppm/°C)	
		Standard	Optional
R005 - R0099	1% - 10%	900	600, 300
R010 - R049	0.50% - 10%	600	300, 200
R050 - R099	0.10% - 10%	300	200, 100, 50
R100 - R990	0.050% - 10%	100	50, 30, 20
1R00 - 9R90	0.020% - 10%	50	30, 20, 10
10R0 and above	0.010% - 10%	30	20, 10, 5

TYPICAL PERFORMANCE

Operating Temperature Range		-55°C to +155°C (275°C available)
Solderability *(<0.032" from PCB)*		95% coverage
Short Time Overload		5x rated W, 5sec
Resistance to Solder Heat *(260°C, 5 sec.)*		±0.10%
Temperature Cycling		±0.20%
Moisture Resistance		±0.20%
Load Life *(1,000 hrs)*		±0.50%
Thermal Shock *(Gullwing ONLY)*		±0.20%
Inductance	*Standard*	1µH to 10µH TYP
	Opt. X *≤50Ω*	0.20µH MAX*
	Opt. X *>50Ω*	0.37µH MAX*

* Specify ***Opt. 75*** for inductance levels 50% that of ***Opt. X***, or ***Opt. 76*** for 33% that of ***Opt. X***

PART NUMBER DERIVATION

MW 2 ☐ - 1001 - F T ☐ W

RCD Type: MW
Size: 1/2 to 35
Options: X, T, P, F, ER, etc.
(leave blank for standard)
Resistance Code: 0.010% to 1%: 3 signif. digits & mult.
ex: R100 = 0.10Ω, 1R00 = 1Ω, 1000 = 100Ω, 1001 = 1KΩ
2% - 10%: 2 signif. digits & mult.
ex: R01 = 0.010Ω, R10 = 0.10Ω, 1R0 = 1Ω, 100 = 10Ω
Tolerance: K = 10%, J = 5%, H = 3%, G = 2%, F = 1%
D = 0.50%, C = 0.25%, B = 0.10%, A = 0.05%, Q = 0.02%, T = 0.01%
Packaging: B = Bulk, T = Tape & Reel
Optional TC: 5 = 5ppm, 10 = 10ppm, 101 = 100ppm, etc.
(leave blank if standard)
Termination: W = RoHS, Q = Tin/Lead
(leave blank if both are acceptable)