

## FEATURES

- Small in size.
- Low in noise.
- High Stability, Reliability
- EIA Standard Color Coded
- Standard, AMMO pack, Tape & Reel available.
- 96 Values per decade.
- Quantity per reel:
  - MJ = 5000
  - MK = 5000
  - ML = 4000
  - MM = 2500

## SPECIFICATIONS

### Material

**Coating:** Epoxy  
**Core:** High grade ceramic.  
**Terminals:** Solder-coated copper lead.

### Electrical

**Max overload voltage:**  
 MJ - 400 V      ML - 700 V  
 MK - 500 V      MM - 1000V

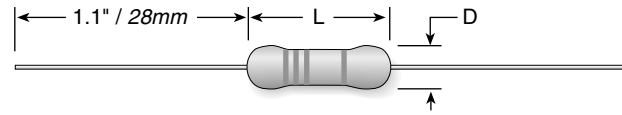
**Derating:** Linearly from 100% @ +70°C to 0% @ +155°C

**Temperature coefficient:**  
 ±50 ppm/°C



# Metal Devil®

**Metal Film Resistors, 1% Tolerance**  
**Available in E96 Ohmic values**  
**Industrial grades; RoHS Compliant**



## ORDERING INFORMATION

RoHS Compliant

**M K 1 0 0 1 F E - R 5 2**

Series	Ohms	Tolerance	Packaging Code
MJ	10R0 = 10	F = 1%	R52 = tape & reel 52mm
MK	1001 = 1,000		(except MM: R58 = Tape & Reel 58mm)
ML	1002 = 10,000		A52(26) = ammo pac 52mm (26mm)
MM	1003 = 100,000		

Series	Wattage	Ohms	Dimensions (in. / mm)		Voltage	Lead ga.
			Max. Length	Max. Diam.		
MJ	0.125	10-1M	0.138 / 3.5	0.073 / 1.85	200	24
MK	0.25	10-1M	0.268 / 6.8	0.099 / 2.5	250	22
ML	0.50	10-1M	0.355 / 9.0	0.118 / 3.0	350	22
MM	1.00	10-1M	0.473 / 12.0	0.199 / 5.0	500	20

Available in Cabinet Assortments (See Page 73)

## AVAILABLE STANDARD VALUES (FOR STANDARD SIZES SHOWN ABOVE)

Wattage						Wattage						Wattage						Wattage					
Ohmic value	Part No. Prefix > Suffix >	Wattage				Ohmic value	Part No. Prefix > Suffix >	Wattage				Ohmic value	Part No. Prefix > Suffix >	Wattage				Ohmic value	Part No. Prefix > Suffix >	Wattage			
		MJ	MK	ML	MM			MJ	MK	ML	MM			MJ	MK	ML	MM			MJ	MK	ML	MM
10.0	10R0F	✓	✓	✓	✓	499.0	4990F	✓	✓	✓	✓	5230	5321F	✓	✓	✓	✓	40,200	4022F	✓	✓	✓	✓
12.1	12R1F	✓	✓	✓	✓	511.0	5110F	✓	✓	✓	✓	5620	5621F	✓	✓	✓	✓	46,400	4642F	✓	✓	✓	✓
15.0	15R0F	✓	✓	✓	✓	604.0	6040F	✓	✓	✓	✓	6040	6041F	✓	✓	✓	✓	49,900	4992F	✓	✓	✓	✓
16.2	16R2F	✓	✓	✓	✓	634.0	6340F	✓	✓	✓	✓	6190	6191F	✓	✓	✓	✓	51,100	5112F	✓	✓	✓	✓
20.0	20R0F	✓	✓	✓	✓	681.0	6810F	✓	✓	✓	✓	6490	6491F	✓	✓	✓	✓	56,200	5622F	✓	✓	✓	✓
20.5	20R5F	✓	✓	✓	✓	698.0	6980F	✓	✓	✓	✓	6810	6811F	✓	✓	✓	✓	57,600	5762F	✓	✓	✓	✓
22.1	22R1F	✓	✓	✓	✓	750.0	7500F	✓	✓	✓	✓	6980	6981F	✓	✓	✓	✓	61,900	6192F	✓	✓	✓	✓
24.9	24R9F	✓	✓	✓	✓	825.0	8250F	✓	✓	✓	✓	7500	7501F	✓	✓	✓	✓	68,100	6812F	✓	✓	✓	✓
30.1	30R1F	✓	✓	✓	✓	909.0	9090F	✓	✓	✓	✓	8060	8061F	✓	✓	✓	✓	69,800	6982F	✓	✓	✓	✓
39.2	39R2F	✓	✓	✓	✓	1000	1001F	✓	✓	✓	✓	8660	8661F	✓	✓	✓	✓	75,000	7502F	✓	✓	✓	✓
49.9	49R9F	✓	✓	✓	✓	1100	1101F	✓	✓	✓	✓	9090	9091F	✓	✓	✓	✓	80,600	8062F	✓	✓	✓	✓
51.1	51R1F	✓	✓	✓	✓	1210	1211F	✓	✓	✓	✓	10,000	1002F	✓	✓	✓	✓	82,500	8252F	✓	✓	✓	✓
60.4	60R4F	✓	✓	✓	✓	1400	1401F	✓	✓	✓	✓	11,000	1102F	✓	✓	✓	✓	90,900	9092F	✓	✓	✓	✓
75.0	75R0F	✓	✓	✓	✓	2000	2001F	✓	✓	✓	✓	11,500	1152F	✓	✓	✓	✓	100,000	1003F	✓	✓	✓	✓
82.5	82R5F	✓	✓	✓	✓	2100	2101F	✓	✓	✓	✓	12,100	1212F	✓	✓	✓	✓	110,000	1103F	✓	✓	✓	✓
90.9	90R9F	✓	✓	✓	✓	2430	2431F	✓	✓	✓	✓	13,000	1302F	✓	✓	✓	✓	121,000	1213F	✓	✓	✓	✓
100.0	1000F	✓	✓	✓	✓	2490	2491F	✓	✓	✓	✓	14,000	1402F	✓	✓	✓	✓	130,000	1303F	✓	✓	✓	✓
133.0	1330F	✓	✓	✓	✓	2740	2741F	✓	✓	✓	✓	15,000	1502F	✓	✓	✓	✓	140,000	1403F	✓	✓	✓	✓
143.0	1430F	✓	✓	✓	✓	2800	2801F	✓	✓	✓	✓	15,800	1582F	✓	✓	✓	✓	150,000	1503F	✓	✓	✓	✓
150.0	1500F	✓	✓	✓	✓	3010	3011F	✓	✓	✓	✓	16,200	1622F	✓	✓	✓	✓	158,000	1583F	✓	✓	✓	✓
182.0	1820F	✓	✓	✓	✓	3240	3241F	✓	✓	✓	✓	18,200	1822F	✓	✓	✓	✓	178,000	1783F	✓	✓	✓	✓
200.0	2000F	✓	✓	✓	✓	3320	3321F	✓	✓	✓	✓	20,000	2002F	✓	✓	✓	✓	200,000	2003F	✓	✓	✓	✓
221.0	2210F	✓	✓	✓	✓	3830	3831F	✓	✓	✓	✓	21,000	2102F	✓	✓	✓	✓	210,000	2103F	✓	✓	✓	✓
249.0	2490F	✓	✓	✓	✓	3920	3921F	✓	✓	✓	✓	22,100	2212F	✓	✓	✓	✓	221,000	2213F	✓	✓	✓	✓
301.0	3010F	✓	✓	✓	✓	4220	4221F	✓	✓	✓	✓	24,300	2432F	✓	✓	✓	✓	232,000	2323F	✓	✓	✓	✓
332.0	3320F	✓	✓	✓	✓	4320	4321F	✓	✓	✓	✓	24,900	2492F	✓	✓	✓	✓	267,000	2673F	✓	✓	✓	✓
342.0	3420F	✓	✓	✓	✓	4530	4531F	✓	✓	✓	✓	28,000	2802F	✓	✓	✓	✓	301,000	3013F	✓	✓	✓	✓
402.0	4020F	✓	✓	✓	✓	4640	4641F	✓	✓	✓	✓	30,100	3012F	✓	✓	✓	✓	511,000	5113F	✓	✓	✓	✓
422.0	4220F	✓	✓	✓	✓	4750	4751F	✓	✓	✓	✓	35,700	3572F	✓	✓	✓	✓	750,000	7503F	✓	✓	✓	✓
432.0	4320F	✓	✓	✓	✓	4990	4991F	✓	✓	✓	✓	36,500	3652F	✓	✓	✓	✓	1,000,000	1004F	✓	✓	✓	✓
475.0	4750F	✓	✓	✓	✓	5110	5111F	✓	✓	✓	✓	39,200	3922F	✓	✓	✓	✓						