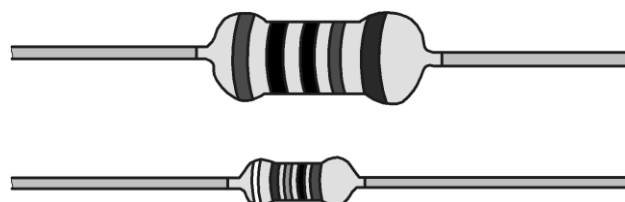


FEATURES

- High power in small packages
- Climatic category 60/155/56

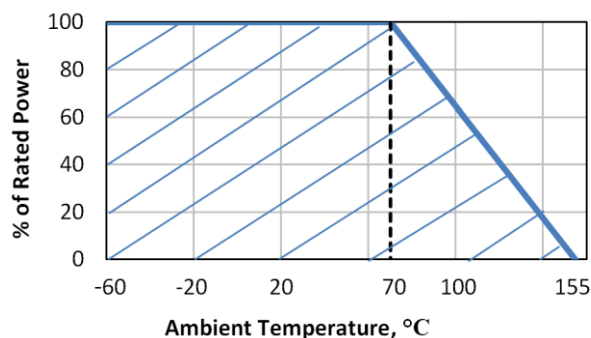


GENERAL SPECIFICATIONS

■ Operating Temp. Range:	-60 °C to 155 °C
■ Load Life 70 °C/ 1000 h:	5 %
■ Max. Resistance Change at Rated Dissipation ΔR/R max. after 25000 h	10 %
■ Package:	Leaded
■ Process:	Metal Film
■ Substrate Material:	85 % Al ₂ O ₃
■ Coating:	Enamel
■ Termination Finish:	Sn-Pb

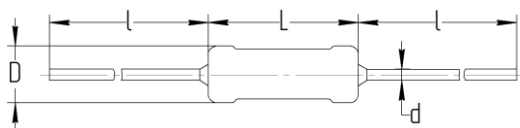
Part Number	Size	Power (W)	Resistance Value ¹ , (Ohms)	Resistance Tolerance (± %)	Max. Operating Voltage (V)	Temperature Coefficient (ppm/°C)
R1-128-1000	0207	0.6 1	0.22-1 1.02-1M	5, 2, 1	350	±250
R1-128-2000	0411	1.2 2	0.33-1 1.02-1M	5, 2, 1	500	±250

⁽¹⁾ E48 Series for tolerance 5 %; E96 Series for tolerance: 1 %, 2 %



PART NUMBER CODE

R1-128	2000	1001	J
model	power	value	tolerance
	1000 = 1 W 2000 = 2 W	R220 = 0.22 Ω 1R02 = 1.02 Ω 1001 = 1 KΩ 1004 = 1 MΩ	F = 1 % G = 2 % J = 5 %



Part Number	Size	Dimensions (mm)			Mass (g)	
		L	ØD	l		
R1-128-1000	0207	6±0.6	2.3±0.3	28±2	0.6±0.1	0.25
R1-128-2000	0411	11.5 ⁺¹ _{-1.5}	4.5±0.5	35±2	0.8±0.1	1

PERFORMANCE CHARACTERISTICS

Test	Condition	ΔR max.
Robustness of termination	IEC60115-1 (4.16)/ IEC 60068-2-21 Bending; Tensile	± 2 %
Solderability	IEC60115-1 (4.17)/ IEC 60068-2-20 (235±5) °C; 2 s; solder bath method; SnPb40	Good tinning (>95 % covered, no visible damage)
Resistance to soldering heat	IEC60115-1 (4.18.2)/ IEC 60068-2-20 (260±5) °C; (5±1) s	± 2 %; no visible damage
Cold	IEC60115-1 (4.23.4)/ IEC 60068-2-1 -60 °C; 1 h	± 2 %
Rapid change of temperature	IEC60115-1 (4.19)/ IEC 60068-2-14 30 min at -60 °C; 30 min at 155 °C; 5 cycles	± 2 %
Vibration	IEC60115-1 (4.22)/ IEC 60068-2-6 32 sweep cycles per direction; 100 Hz to 2000 Hz; 2 mm; 200 m/s ²	± 2 %
Low air pressure	IEC60115-1 (4.23.5)/ IEC 60068-2-13 0,67 kPa; 30 min; 15 °C to 35 °C	No visible damage
Damp heat, steady state	IEC60115-1 (4.24)/ IEC 60068-2-78 (40±2) °C; 56 days; (93±3) % RH	± 2 %

All tests are carried out in accordance with the following specifications:

- IEC 60115-1 (clause),
- IEC 60068-2-xx (test method).

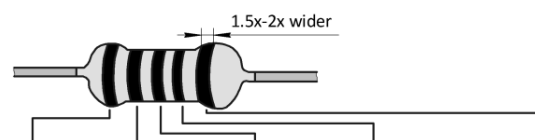
PACKAGING

Carton box.

MOUNTING PROCEDURE

Can be used in automatic or manual assembly techniques.

MARKING



Color	Nominal value			multiplier	Tolerance, ± %
	1 st digit	2 nd digit	3 rd digit		
Silver	-	-	-	0.01	-
Gold	-	-	-	0.1	5
Black	-	0	0	1	-
Brown	1	1	1	10	1
Red	2	2	2	100	2
Orange	3	3	3	1K	-
Yellow	4	4	4	10K	-
Green	5	5	5	-	-
Blue	6	6	6	-	-
Violet	7	7	7	-	-
Grey	8	8	8	-	-
White	9	9	9	-	-