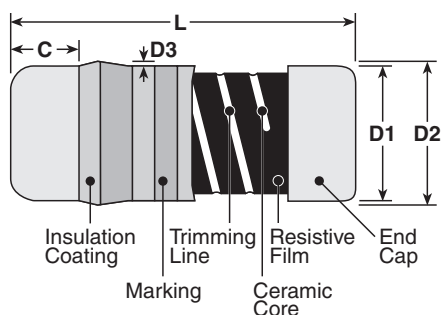


features

- Suitable for reflow and wave soldering
- Metal plate terminals
- Meets or exceeds EIAJ-8009, EIA-PDP-100
- Marking: Ivory body color with three color-coded bands
- Products with lead-free terminations meet RoHS requirements. Pb located in glass material, electrode and resistor element is exempt per Annex 1, exemption 5 of EU directive 2005/95/EC

dimensions and construction



Type (Inch Size Code)	Dimensions inches (mm)				
	L	C (min.)	D1	D2 (max.)	D3 (max.)
2A (0805)	.079±.004 (2.0±0.1)	.012 (0.3)	.049±.002 (1.25±0.05)	.053 (1.35)	.003 (0.07)
2B (1406)	.138±.008 (3.5±0.2)	.02 (0.5)	.057±.004 (1.45±0.1)	.061 (1.55)	.004 (0.1)
2D (1206)	.126±.008 (3.2±0.2)	.02 (0.5)	.061±.006 (1.55±0.15)	.069 (1.75)	.004 (0.1)
2E (2309)	.232±.008 (5.9±0.2)	.02 (0.5)	.087±.004 (2.2±0.1)	.094 (2.4)	.006 (0.15)

ordering information

New Part #	RD41	2B	T	TE	103	J
Type						
Size		2A 2B 2D 2E				
Termination Material			T: Sn (Other termination styles may be available, please contact factory for options)			
Packaging				TE: 7" embossed plastic (2A, 2B - 3,000 pieces/reel) (2D - 2,000 pieces/reel) (2E - 1,500 pieces/reel)		
Nominal Resistance					2 significant figures + 1 multiplier "R" indicates decimal on value <10Ω	
Tolerance						G: ±2% J: ±5%

For further information on packaging, please refer to Appendix A.

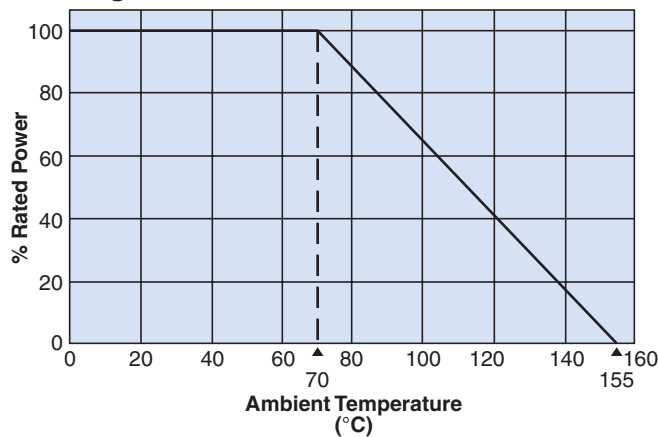
applications and ratings

Part Designation	Power Rating @ 70°C	Resistance Range E-24*	Absolute Maximum Working Voltage	Absolute Maximum Overload Voltage	Resistance Tolerance	Operating Temperature Range
RD412A	0.125W	2.2Ω - 1.0MΩ	150V	200V	G: ±2% J: ±5%	-55°C to +155°C
RD412B	0.125W	2.2Ω - 1.0MΩ	200V	400V		
RD412D	0.2W	1.0Ω - 1.0MΩ	200V	400V		
RD412E	0.25W	1.0Ω - 2.2MΩ	300V	600V		

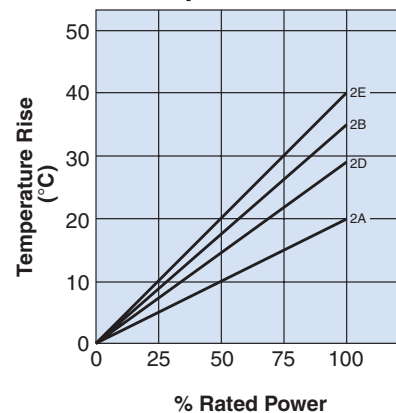
* See Appendix D for available decade values.

environmental applications

Derating Curve



Surface Temperature Rise



Performance Characteristics

Parameter	Maximum ΔR \pm (% + 0.05Ω)	Test Method
Short Time Overload	±1.0%	MIL-R-55342 π 4.7.5, 2.5 x RCWV* for 5 seconds
Effects of Solder Heat	±1.0%	MIL-R-55342 π 4.7.7, 260°C for 5 seconds
Thermal Shock	±1.0%	MIL-STD-202, Method 107, -55°C to +155°C, 5 cycles
Low Temperature Exposure	±1.0%	MIL-R-55342 π 4.7.4, 1 Hour @ -55°C
High Temperature Exposure	±2.0%	100 hours @ 155°C
Pulse	±2.0%	2.5 x RCWV, not exceeding maximum overload voltage, 1 second ON, 25 seconds OFF, 10,000 cycles
Moisture Resistance	Limit ±5.0%, Typical ±2.5%	MIL-STD-202, Method 103, 40°C, 90 - 95% RH, 1000 hours
Life	±3.0%	MIL-STD-202, Method 108, 70°C, 1000 hours @ RCWV, 1.5 hr ON, 0.5 hr OFF
Dielectric Withstanding Voltage		
2A	200V Minimum	1 minute minimum MIL-STD-202, Method 301
2B	400V Minimum	
2D	400V Minimum	
2E	400V Minimum	
Insulation Resistance	10,000 MΩ Minimum	—

* RCWV = Rated Continuous Working Voltage.