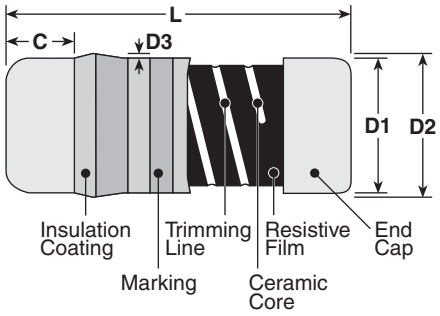
EU RoHS COMPLIANT



features

- Suitable for reflow and wave soldering
- Metal plate terminals
- Meets or exceeds IEC 60115-8, EIAJ RC-2131A
- Marking: Ivory body color with three color-coded bands
- Products with lead-free terminations meet EU RoHS and China RoHS requirements

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)	
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	Termination Material	Packaging	Nominal Resistance	Tolerance
	2A 2B 2D 2E	T: Sn	TE: 7" embossed plastic (2A, 2B - 3,000 pieces/reel) (2D - 2,000 pieces/reel) (2E - 1,500 pieces/reel)	2 significant figures + 1 multiplier "R" indicates decimal on value <10Ω	G: ±2% J: ±5%

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

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

1/13/09

KOA SPEER ELECTRONICS, INC.

RD41

fixed carbon film melf resistor

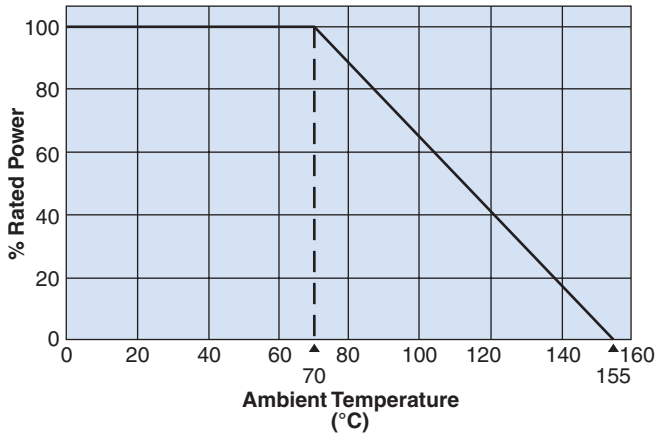
applications and ratings

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		

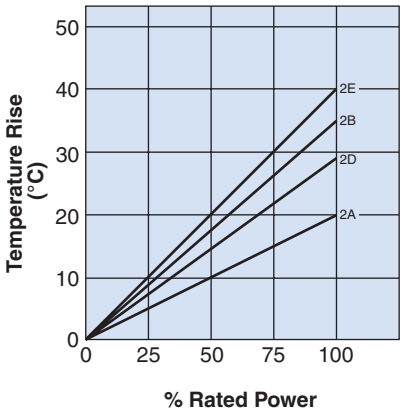
* See Appendix D for available decade values.

environmental applications

Derating Curve



Surface Temperature Rise



Performance Characteristics

Parameter	Requirement Δ R Limit	Requirement Δ R Typical	Test Method
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	+25°C/-55°C, +25°C/+125°C
Overload (Short time)	±1.0%	±0.5%	Rated voltage x 2.5 for 5 seconds
Intermittent Overload	±1.0%	—	Rated voltage x 4 (2Ax3) or Max. intermittent overload voltage, whichever is lower, 10,000 cycles. 2A: 300V, 2B: 400V, 2D: 500V, 2E: 600V
Resistance to Solder Heat	±1.0%	±0.5%	260°C ± 5°C, 10 seconds ± 1 second
Rapid Change of Temperature	±1.0%	±0.75%	-55°C (30 minutes), +125°C (30 minutes), 5 cycles
Moisture Resistance	±5.0%	±2.5%	40°C ± 2°C, 90 - 95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 70°C	±2.0%	±1.0%	70°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Low Temperature Operation	±1.0%	±0.75%	-55°C, 1 hour
High Temperature Exposure	±2.0%	±1.0%	+125°C, 100 hours

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