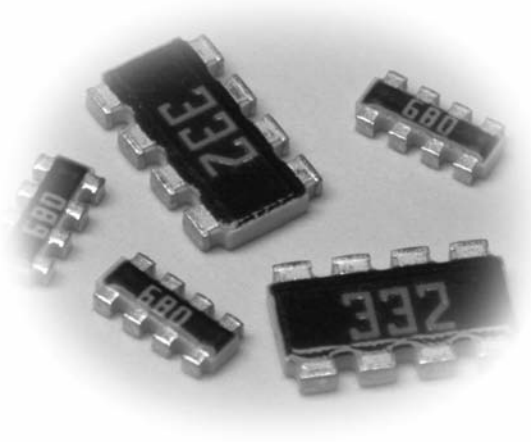
KOA SPEER ELECTRONICS, INC.

CN__A

convex termination with scalloped corners resistor array

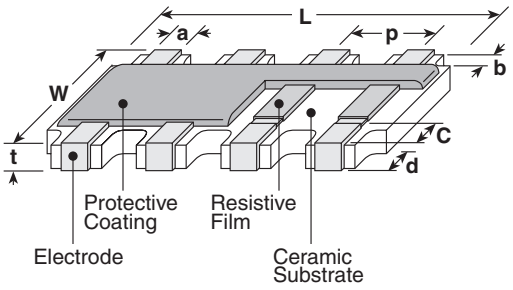


RoHS COMPLIANT

features

- Manufactured to type RK73 standards
- Less board space than individual chips
- Isolated resistor elements
- Convex terminations with scalloped corners
- Marking: Marked with resistance value
- 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



Size Code	Dimensions inches (mm)							
	L	W	C	d	t	a	b	p (ref.)
1J4A	.126±.006 (3.2±0.15)	.063±.006 (1.6±0.15)	.012±.008 (0.3±0.2)	.010±.004 (0.25±0.1)	.020±.004 (0.5±0.1)	.020±.006 (0.5±0.15)	.012±.004 (0.3±0.1)	.031 (0.8)
2B4A	0.2±.008 (5.1±0.2)	.122±.008 (3.1±0.2)	.020±.008 (0.5±0.2)	.014±.006 (0.35±0.15)	.022±.004 (0.55±0.1)	.031±.008 (0.8±0.2)	.018±.004 (0.45±0.1)	.050 (1.27)

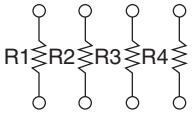
ordering information

New Part #

CN	1J	4	A	T	TD	101	J
Type	Size	Elements	Terminal Convex	Termination Material	Packaging	Nominal Resistance	Tolerance
	1J 2B			T: Sn (Other termination styles maybe available, please contact factory for options)	TE: 7" embossed plastic TD: 7" paper tape TED: 10" embossed plastic TDD: 10" paper tape	2 significant figures + 1 multiplier for ±2% & ±5% 3 significant figures + 1 multiplier for ±1%	F: ±1% J: ±5%

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

circuit schematic

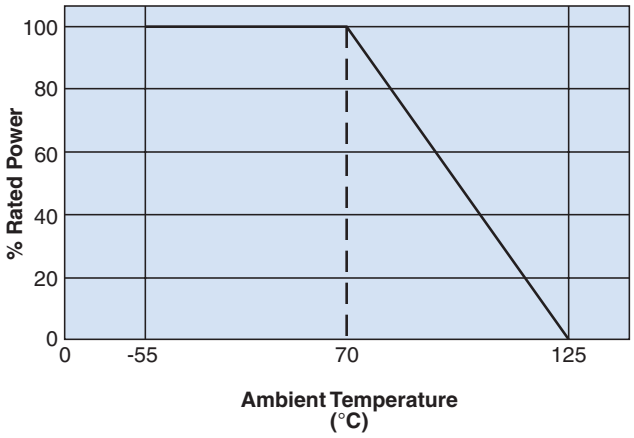


applications and ratings

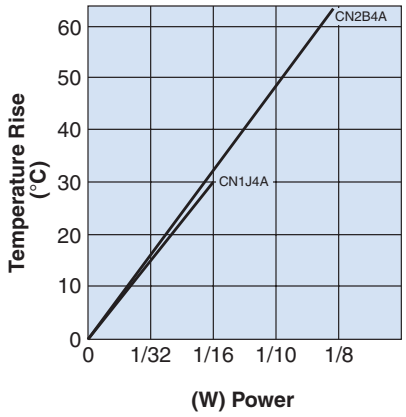
Part Designation	Power Rating @ 70°C (Per Element)	T.C.R. (ppm/°C) Max.	Resistance Range E-96 (F±1%)	Resistance Range E-24 (J±5%)	Absolute Maximum Working Voltage	Absolute Maximum Overload Voltage	Operating Temperature Range
CN1J4A	1/16W (.063W)	±200:≥10Ω ±400:R<10Ω	10 - 100kΩ	1Ω - 1MΩ	50V	100V	-55°C to +125°C
CN2B4A	1/8W (.125W)		—	10Ω - 1MΩ	200V	400V	

environmental applications

Derating Curve



Surface Temperature Rise



Performance Characteristics

Parameter	Maximum Δ R	Test Method
Thermal Shock	±(1.0% + 0.1Ω)	MIL-STD-202, Method 107, -55°C to +125°C, 5 cycles
Low Temperature Operation		MIL-R-55342 π 4.7.4, 1 hour @ -55°C followed by 45 minutes of RCWV*
High Temperature Exposure		MIL-R-55342 π 4.7.6, 100 hours @ 125°C
Short Time Overload	±(2.0% + 0.05Ω)	MIL-R-55342 π 4.7.5, 2.5 x RCWV for 5 seconds
Resistance to Solder Heat	±(1.0% + 0.1Ω)	MIL-R-55342 π 4.7.7, 260°C for 10 seconds
Terminal Strength-Push		1.2 Kg for 1 minute
Terminal Strength-Bend	±(0.5% + 0.05Ω)	5mm deflection in either direction for 10 seconds
Moisture Resistance	±5.0%	MIL-STD-202, Method 103, 40°C, 90 - 95% RH, 1000 hours
Life		MIL-STD-202, Method 108, 70°C, 1000 hours @ RCWV, 1.5 hr ON, 0.5 hr OFF
Pulse		2.5 x RCWV, not exceeding max. overload voltage, 1 sec. ON, 25 sec. OFF, 10,000 cycles
Temperature Cycling	±1.0%	30 min. @ -55°C, 15 min. @ +25°C, 30 min. @ +125°C, 15 min. @ +25°C, 5 cycles
Terminal Adhesion	15 Grams Minimum	Axial pull, one terminal at a time
Dielectric Withstanding Voltage CN1J4A CN2B4A	 100V 400V	 1 minute minimum MIL-STD-202, Method 301
Insulation Resistance	1,000 MΩ Minimum	—

* RCWV = Rated Continuous Working Voltage.