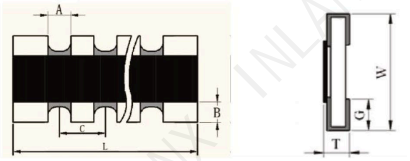
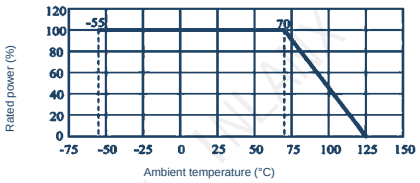
CRN Thick Film Chip Resistor Networks

Outline Drawing



Derating Curve





Quality grade: J. Detail specification: Q/RU 350A-2012. Generic specification: GB/T 5729-2003. CRN1608B4R is available in general-military and seven-special quality grades.

Outline Dimensions • mm

Model	L	W	T	A	B	C	G
CRN1005B2R	1.00±0.10	1.00±0.10	0.35±0.10	0.33±0.10	0.17±0.10	0.65±0.05	0.25±0.10
CRN1005B4R	2.00±0.10	1.00±0.10	0.45±0.10	0.30±0.05	0.20±0.15	0.50±0.15	0.30±0.15
CRN1005B8R	4.00±0.20	1.00±0.10	0.50±0.10	0.30±0.05	0.20±0.15	0.50±0.15	0.40±0.15
CRN1608B2R	1.60±0.20	1.60±0.20	0.60±0.10	0.35±0.15	0.30±0.15	0.80±0.05	0.35±0.15
CRN1608B4R	3.20±0.20	1.60±0.20	0.60±0.10	0.35±0.15	0.30±0.15	0.80±0.05	0.35±0.15
CRN1608B8R	6.40±0.15	1.60±0.20	0.60±0.10	0.50±0.15	0.30±0.10	0.80±0.05	0.40±0.15
CRN1608C8R	3.20±0.20	1.60±0.15	0.55±0.10	0.32±0.10	0.30±0.15	0.64±0.10	0.30±0.15
CRN3216C8R	6.40±0.20	3.10±0.20	0.60±0.10	0.60±0.15	0.35±0.15	1.27±0.10	0.55±0.15
CRN3216B2R	2.54±0.20	2.00±0.20	0.60±0.15	0.40±0.20	0.30±0.15	1.27±0.10	0.45±0.20
CRN3216B4R	5.08±0.15	3.00±0.15	0.50±0.10	0.71±0.10	0.50±0.10	1.27±0.10	0.50±0.10

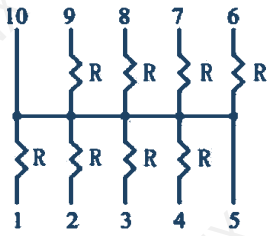
Electrical Specifications

R in Ω; rated voltage is the smaller of the square-root result and the stated voltage limit.

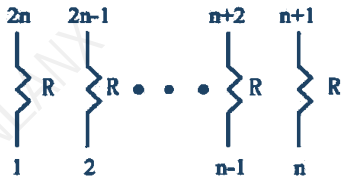
Model	Power W	Resistance	Tolerance	Rated voltage	TCR ×10^-6/K
CRN1005B2R	1/32	1 Ω~1 MΩ	±1%, ±2%, ±5%	min(√(0.031R), 25) V	±100, ±250
CRN1005B4R	1/32	1 Ω~1 MΩ	±1%, ±2%, ±5%	min(√(0.031R), 25) V	±100, ±250
CRN1005B8R	1/32	10 Ω~1 MΩ	±1%, ±2%, ±5%	min(√(0.031R), 25) V	±100, ±250
CRN1608B2R	1/16	10 Ω~1 MΩ	±1%, ±2%, ±5%	min(√(0.063R), 50) V	±100, ±250
CRN1608B4R	1/16	1 Ω~1 MΩ	±1%, ±2%, ±5%	min(√(0.063R), 50) V	±100, ±250
CRN1608B8R	1/16	1 Ω~1 MΩ	±1%, ±2%, ±5%	min(√(0.063R), 50) V	±100, ±250
CRN1608C8R	1/16	10 Ω~1 MΩ	±1%, ±2%, ±5%	min(√(0.063R), 25) V	±100, ±250
CRN3216C8R	1/16	10 Ω~1 MΩ	±1%, ±2%, ±5%	min(√(0.063R), 50) V	±100, ±250
CRN3216B2R	1/4	10 Ω~1 MΩ	±1%, ±2%, ±5%	min(√(0.25R), 100) V	±100, ±250
CRN3216B4R	1/4	10 Ω~1 MΩ	±1%, ±2%, ±5%	min(√(0.25R), 100) V	±100, ±250

CRN Thick Film Chip Resistor Networks

Circuit Diagrams



Circuit C



Circuit B

Main Inspection Items

UR/IR: rated voltage/current; Umax: limiting element voltage.

Item	Non-zero requirement	Test method
Temperature coefficient	S: ±100×10^-6/K; U: ±250×10^-6/K	-55℃ to 125℃
Rapid temperature change	ΔR≤±(1%R+0.05 Ω)	-55℃ to 125℃, 5 cycles
Overload	ΔR≤±(1%R+0.05 Ω)	2.5UR (≤2Umax), 5 s
Resistance to soldering heat	ΔR≤±(1%R+0.05 Ω)	260℃, 10 s
End-face coating adhesion	ΔR≤±(1%R+0.05 Ω)	Bend 1 mm, (5±1) s
Damp heat, steady state	ΔR≤±(5%R+0.1 Ω)	40℃, RH (93±3)%, 56 d
Climatic sequence	ΔR≤±(5.0%R+0.1 Ω)	125℃/16 h; cyclic damp heat 24 h; -55℃/2 h; cyclic damp heat 5 d; DC load 1 min
Endurance at 70℃	ΔR≤±(5%R+0.1 Ω)	70℃, UR (≤Umax), 1000 h
Solderability	Electrode solder coverage 90%	Unaged, 235℃, 2 s

Ordering Information

CRN1608B4RU472JP

Model / Circuit B or C / Resistor count 2R, 4R or 8R (2, 4 or 8 resistors) / TCR U±250 or S±100×10^-6/K / E24 or E96 nominal resistance / F±1%, G±2%, J±5% / Termination P lead-containing or N lead-free