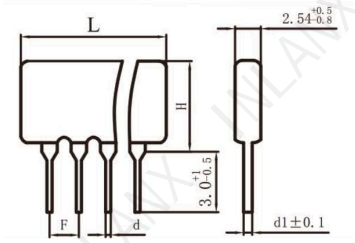
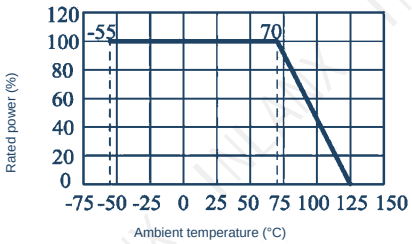
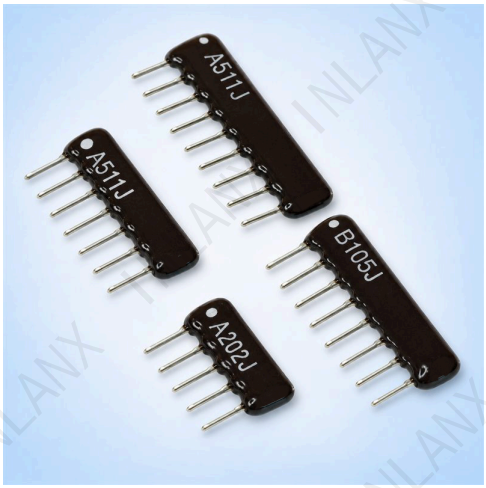
RN Thick Film Resistor Networks

Outline Drawing



Derating Curve





Quality grade: inverted triangle G mark, J. Detail specification: Q/RU 022A-2012. Generic specification: GB/T 5729-2003.

Outline Dimensions • mm

N is the number of terminals. Models: RN3R to RN19R.

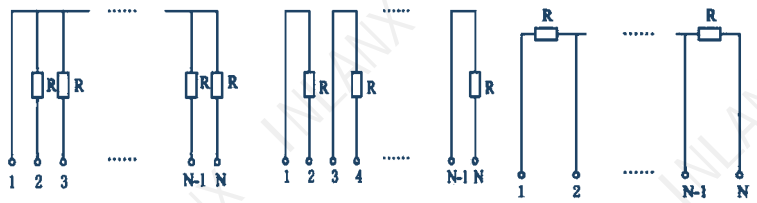
Model	F	d	d1	H N(3-11)	H N(12-19)	L
RN(P-2.54)	2.54±0.25	0.50±0.10	0.3	4.98±0.22	6.78±0.22	2.54 max×(N-1)+4
RN(S-1.78)	1.78±0.20	0.45±0.12	0.25	4.98±0.22	6.78±0.22	1.78 max×(N-1)+4

Electrical Specifications

Product power = number of resistors × power per resistor.

Model	Per resistor W	Limit V	Resistance	Tolerance	TCR
RN(P-2.54)	0.125	100	1 Ω~10 MΩ	±0.5%, ±1%, ±2%, ±5%	±250×10^-6/K
RN(S-1.78)	0.1	50	1 Ω~10 MΩ	±0.5%, ±1%, ±2%, ±5%	±250×10^-6/K

Circuit Diagrams



Circuit A Circuit B Circuit C

Main Inspection Items

UR: rated voltage; Umax: limiting element voltage.

Item	Requirement	Test method
Temperature coefficient	U: ±250×10^-6/K	-55℃ to 125℃
Overload	ΔR≤±(1.0%R+0.05 Ω)	2.5UR (≤2Umax), 5 s
Rapid temperature change	ΔR≤±(1.0%R+0.05 Ω)	-55℃ to 125℃, 5 cycles
Resistance to soldering heat	ΔR≤±(1.0%R+0.05 Ω)	260℃, 10 s
Damp heat, steady state	ΔR≤±(5.0%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

RN Thick Film Resistor Networks

Main Inspection Items (continued)

Item	Requirement	Test method
Endurance at 70℃	ΔR≤±(5.0%R+0.1 Ω)	70℃, UR (≤Umax), 1000 h
Solderability	Solder coverage ≥90%	Unaged, 235℃, 2 s

Ordering Information

RN8RA472JPUP

Model RN / Resistor count (8R: 8 resistors) / Circuit A, B or C / E24 nominal resistance / F±1%, G±2%, J±5% / Lead pitch P 2.54 mm or S 1.78 mm / U±250×10^-6/K / Termination P lead-containing or N lead-free