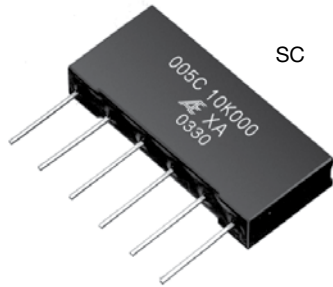


Ultra Precision Resistor Network (Case-Encapsulated)



RoHS
COMPLIANT

COMPOSITION OF TYPE NUMBER

Example:

SC 005C 1K000 / 99K00 B Q

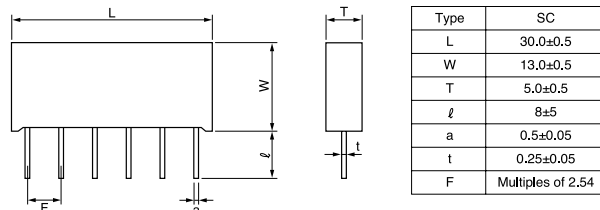
① ② ③ ④ ⑤ ⑥

- ① Type ④ Resistance Value (Rn)
 ② Circuit Symbol ⑤ Resistance Tolerance (Absolute)
 ③ Resistance Value (R1) ⑥ Resistance Tolerance (Matching)

Please specify all values for R1 to Rn when you consult or order us.

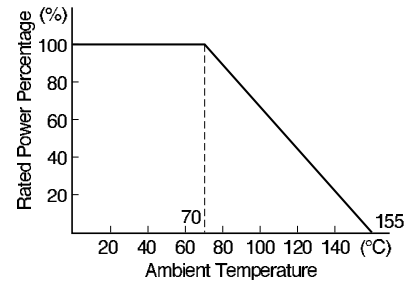
Resistance value, in ohm, is expressed by a series of five characters, four of which represent significant digits. R or K is a dual-purpose letter that designates both the value range (R for ohmic; K for kilo-ohm) and the location of decimal point.

CONFIGURATION (DIMENSIONS IN mm)



Lead space will be determined depending on circuit and number of elements.

POWER DERATING CURVE



TCR, RESISTANCE RANGE, TOLERANCE, RATED POWER

Type	TCR (ppm/°C) -25°C to +125°C	Resistance Range Element (Ω)*	Max. Resistance Value Package (Ω)	Resistance Tolerance (%)		Rated Power/ Package (W) at 70°C
				Absolute**	Matching**	
SC	0±5	30 to 120k	1,200k	±0.01 (T) ±0.02 (Q) ±0.05 (A) ±0.1 (B) ±0.5 (D) ±1 (F)	±0.01 (T) ±0.02 (Q) ±0.05 (A) ±0.1 (B) ±0.5 (D) ±1 (F)	1.5

*TCR tracking is dependent on resistance ratio. See Table 1 on P32, Ultra Precision Network datasheet.

**Symbols parenthesized are for type number composition.

PERFORMANCE

Parameters	Test Condition	ALPHA Specification		ALPHA Typical Test Data	
		ΔR	ΔRatio	ΔR	ΔRatio
Maximum Rated Operating Temperature Working Temperature Range		70°C -55°C to +155°C			
Thermal Shock	-55°C/30 min. ↔ +155°C/30 min., 5 cycles	±0.05%	±0.01%	±0.01%	±0.005%
Low Temperature Storage Overload	-55°C, No Load, 2 hrs. Rated Voltage x 2.5, 5 sec.	±0.05%	±0.01%	±0.005%	±0.0025%
Terminal Strength	0.51 kg (1.123 pounds), 10 sec.	±0.05%	±0.01%	±0.005%	±0.0025%
Dielectric Withstanding Voltage Insulation Resistance	Atmo. Pres.: AC 300V, 1 min. DC 100V, 1 min.	±0.03%	±0.01%	±0.005%	±0.0025%
Resistance to Soldering Heat Moisture Resistance	350°C, 3 sec. +65°C to -10°C, 90% RH to 98% RH, Rated Voltage, 10 cycles (240 hrs.)	±0.03% ±0.05%	±0.01% ±0.01%	±0.005% ±0.015%	±0.0025% ±0.005%
Shock Vibration	100G, 6 ms., Sawtooth Wave, X, Y, Z, each 6 shocks 20G, 10 Hz to 55 Hz to 10 Hz, 1 min., X, Y, Z, each 2 hrs.	±0.03% ±0.03%	±0.01% ±0.01%	±0.005% ±0.005%	±0.0025% ±0.0025%
Life (Rated Load)	70°C, Rated Power, 1.5 hrs. – ON, 0.5 hr. – OFF, 1,000 hrs.	±0.05%	±0.01%	±0.01%	±0.005%
Life (Moisture Load)	40°C, 90% RH to 95% RH, Rated Power, 1.5 hrs. – ON, 0.5 hr. – OFF, 1,000 hrs.	±0.05%	±0.01%	±0.01%	±0.005%
High Temperature Exposure	155°C, No Load, 1,000 hrs.	±0.03%	±0.01%	±0.01%	±0.005%
Storage Life	15°C to 35°C, 15% RH to 75% RH, No Load, 10,000 hrs.	±0.03%	±0.01%	±0.005%	±0.0025%

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