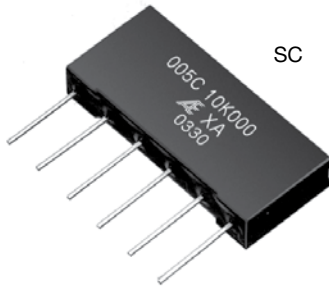


Ultra Precision Resistor Network (Case-Encapsulated)



COMPOSITION OF TYPE NUMBER

Example:

SC 005C 1K000 / 99K00 B Q

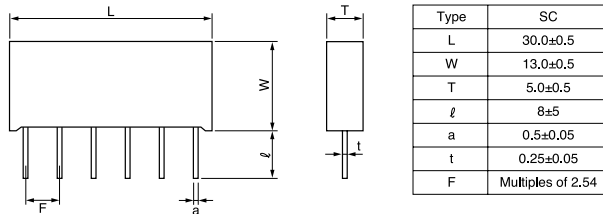
① ② ③ ④ ⑤ ⑥

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

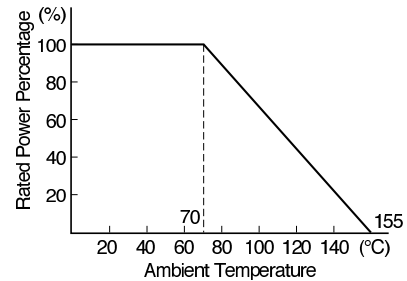
Please specify all values for R1 to Rn when you consult or order us.

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)



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 Terminal Strength	-55°C, No Load, 2 hrs. Rated Voltage x 2.5, 5 sec. 0.51 kg (1.123 pounds), 10 sec.	±0.05%	±0.01%	±0.005%	±0.0025%
Dielectric Withstanding Voltage Insulation Resistance Resistance to Soldering Heat Moisture Resistance	Atmo. Pres.: AC 300V, 1 min. DC 100V, 1 min. 350°C, 3 sec. +65°C to -10°C, 90% RH to 98% RH, Rated Voltage, 10 cycles (240 hrs.)	±0.03%	±0.01%	±0.005%	±0.0025%
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%	±0.01%	±0.005%	±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%