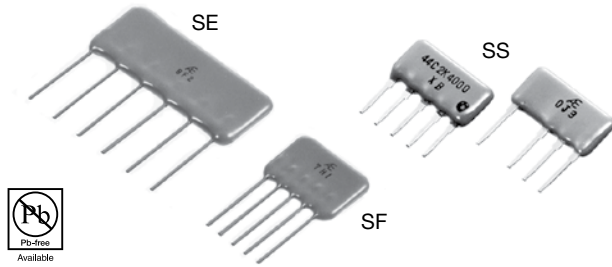


## Precision Resistor Network (Conformally Coated)



RoHS  
COMPLIANT

### COMPOSITION OF TYPE NUMBER

Example:

**SE 004A 1K000 /8K000 B A**

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)

Specify all values for R1 to Rn

### CONFIGURATION (DIMENSIONS IN mm)

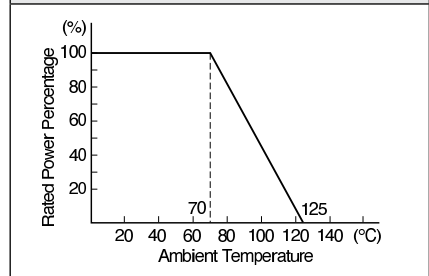
Type	SE	SF	SS
<b>L</b>	29.0±0.5	14.0±0.5	7.5±0.5 to 16.5±0.5
<b>W</b>	12.5±0.5	10.0±0.5	7.3±0.5
<b>T</b>	2.7±0.5		2.2±0.5
<b>ℓ</b>	5±1		
<b>t</b>	0.3±0.05		
<b>a</b>	1.0±0.5		
<b>b</b>	0.65±0.05		
<b>c</b>	0.4±0.05		
<b>F</b>	Multiple of 2.54		

### TCR, RESISTANCE RANGE, TOLERANCE, RATED POWER

Type	TCR (ppm/°C)* -25°C to +125°C	Resistance Range Element (Ω)	Maximum Resistance Value Package (Ω)	Resistance Tolerance (%)**		Rated Power/Package (W) at 70°C
				Absolute	Matching	
SE	0±5	30 to 120k	600k	±0.05 (A)	±0.01 (T) ±0.02 (Q)	1
SF		30 to 120k	240k	±0.1 (B) ±0.5 (D)	±0.05 (A) ±0.1 (B) ±0.5 (D)	0.5
SS		30 to 20k	100k	±1 (F)	±1 (F)	0.5

\*TCR tracking is dependent on resistance ratio. See table 1 on page 32.  
\*\*Symbols parenthesized are for type number composition.

### POWER DERATING CURVE



### PERFORMANCE

Parameters	Test Condition	ALPHA Specification		ALPHA Typical Test Data	
		ΔR	ΔRatio	ΔR	ΔRatio
Maximum Rated Operating Temperature Working Temperature Range		70°C -25°C to +125°C			
Temperature Cycling	-25°C/30 min., Room Temperature/5 min., +125°C/30 min., 5 cycles	±0.05%	±0.01%	±0.01%	±0.005%
Low Temperature Storage Overload Terminal Strength	-25°C, No Load, 2 hrs. Rated Voltage x 2.5, 5 sec. 0.51 kg (1.123 pounds), 10 sec.	±0.05%	±0.01%	±0.0025%	±0.001% ±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	50G, 11 ms., Half-Sine Wave, X, Y, Z, each 3 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.	±0.1%	±0.05%	±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.	±0.1%	±0.05%	±0.01%	±0.005%
High Temperature Exposure	125°C, No Load, 1,000 hrs.	±0.1%	±0.05%	±0.01%	±0.005%
Storage Life	15°C to 35°C, 15% RH to 75% RH, No Load, 10,000 hrs.	±0.05%	±0.03%	±0.005%	±0.0025%