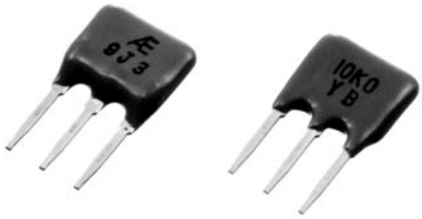
Precision Resistor 1-2-3 Network (Conformally Coated)



TCR, Resistance Range,Tolerance, Rated Power

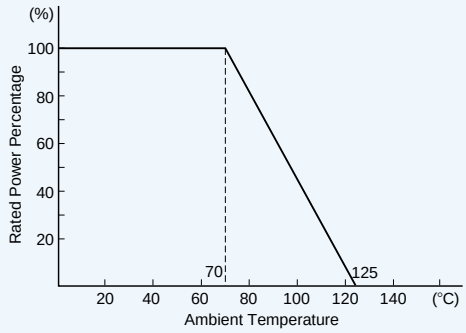
Type	TCR(ppm/°C) −25°C to +125°C		Resistance Range Element(Ω)*	Resistance Tolerance(%)		Rated Power Package(W) at 70°C
	Absolute	Tracking		Absolute	Matching	
SLD	0±5(X) 0±2.5(Y)	See Table 1	50 to 100	±0.1(B) ±0.5(D)	±0.05(A) ±0.1 (B)	0.25
			100 to 30k	±0.05(A) ±0.1 (B)	±0.02(Q) ±0.05(A) ±0.1 (B)	

Symbols parenthesized are for type number composition.
*Consult factory for resistance values composing network.

Table 1. TCR Tracking is Subject to Resistance Ratio

Resistance Ratio	TCR Tracking Available (ppm/°C)
Resistance Ratio=1	±0.5
1<Resistance Ratio ≦10	±1
10<Resistance Ratio ≦100	±2
100<Resistance Ratio	±3

Power Derating Curve



Composition of Type Number

Example:$R_1=R_2$

SLD 1X 10K00 B A
① ②③ ④ ⑤ ⑥

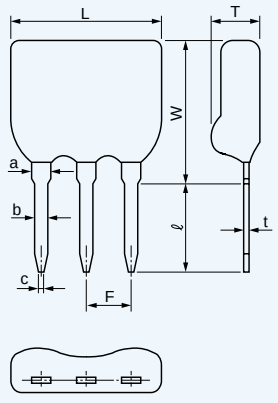
Example:$R_1\neq R_2$

SLD 2X 1K000/10K00 B Q
① ②③ ④ ⑤ ⑥

① Type
② Number of Values
③ TCR absolute
④ Nominal Resistance Values
⑤ Resistance Tolerance(Absolute)
⑥ Resistance Tolerance(Matching)

Resistance value, in ohm, is expressed by a series of 5 characters, 4 of which represent significant digits while the 5th 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



Type	SLD
L	7.5 ±0.5
W	7.5 ±0.5
T	2.2 ±0.5
F	2.54±0.25
ℓ	5 ±1
t	0.3 ±0.05
a	1.0 ±0.05
b	0.65±0.05
c	0.4 ±0.05

Dimensions in mm

Performance

Parameters	Test Condition	ALPHA Specification		ALPHA Typical Test Data	
		⊿R	⊿Ratio	⊿R	⊿Ratio
Max. Rated Operating Temperature Working Temperature Range		70°C −25°C to +125°C			
Temperature Cyciling Overload	−25°C/30min.,Room Temperature/5min.,125°C/30min., 5cycles Rated Voltage×2.5, 5 sec.	±0.05% ±0.05%	±0.01% ±0.01%	±0.01% ±0.0025%	±0.005% ±0.001%
Low Temperature Operation Terminal Strength	−25°C, No Load, 2hrs 0.908kg(2pounds),10 sec.	±0.05% ±0.05%	±0.01% ±0.01%	±0.0025% ±0.0025%	±0.001% ±0.001%
Dielectric Withstanding Voltage	Atmospheric:AC 300V, 1 min.	±0.03%	±0.01%	±0.0025%	±0.001%
Insulation Resistance	DC 100V, 1 min.	over 10,000MΩ		over 10,000MΩ	
Resistance to Soldering Heat Moisture Resistance	350°C, 3 sec. +65°C to −10°C, 90%RH to 98%RH, Rated Voltage, 10cycles(240hrs)	±0.03% ±0.1%	±0.01% ±0.05%	±0.0025% ±0.03%	±0.001% ±0.01%
Shock Vibration	50G, 11ms, Half-sine Wave, X, Y, Z, each 3 shocks 20G, 10Hz to 55Hz to 10Hz, 1min., X, Y, Z, each 2hrs	±0.03% ±0.03%	±0.01% ±0.01%	±0.005% ±0.005%	±0.001% ±0.001%
Life(Rated Load)	70°C, Rated Power, 1.5hr.-ON, 0.5hr.-OFF, 1000hrs	±0.1%	±0.05%	±0.01%	±0.005%
Life(Moisture Load)	40°C, 90%RH to 95%RH, Rated Power, 1.5hr.-ON, 0.5hr.-OFF, 1000hrs	±0.05%	±0.01%	±0.01%	±0.005%
Storage Life	15°C to 35°C, 15%RH to 75%RH, No Load, 10000hrs	±0.02%	±0.01%	±0.005%	±0.0025%
High Temperature Exposure	125°C, No Load, 1000hrs	±0.05%	±0.01%	±0.01%	±0.005%

Example of Applications

An Application of Type SLD (Input/feed-back resistors for amplifiers)
Because the input and the feedback resistors are incorporated into one single element, amplification is not affected by temperature change.