SRN Series Ultra Precision Molded Metal Film Resistors

The content of this specification may change without notification 1/01/06
Custom solutions are available.

HOW TO ORDER:

SRN 55 S 100K B M

Packaging
M = Tape ammo pack (1,000)
B = Bulk (100)

Resistance Tolerance
T = ± 0.01% A = ±0.05%
E = ±0.025%

Resistance Value
e.g. 100K, 62R2, 30K1

Temperature Coefficient (ppm)
U = ±3 R = ±5 S = ±10

Style/Length (mm)
55 = 6.6 65 = 16.0
60 = 10.5 65 = 20.0

Series
Molded Metal Film Precision



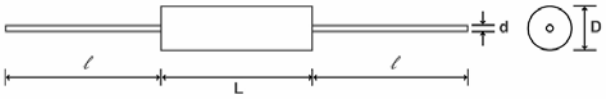
FEATURES

- High Stability and High Reliability
- Very low TCR: ±3ppm/°C to ±10ppm/°C
- Superior resistance tolerance: ±0.01% to ±0.05%
- Insulated constructions by epoxy molding
- Applicable Specifications: EIA 575, MIL-R-10509, and JISC 5722

DIMENSIONS (mm)

Type	L	D	l	d
SRN55	6.6 ± 0.5	3.4 ± 0.2	38 ± 3	0.6 ± 0.05
SRN60	10.5 ± 0.5	3.9 ± 0.2	38 ± 3	0.6 ± 0.05
SRN65	16.0 ± 0.5	5.3 ± 0.3	38 ± 3	0.6 ± 0.05
SRN70	20.0 ± 0.5	7.0 ± 0.5	38 ± 3	0.8 ± 0.05

SCHEMATIC



STANDARD ELECTRICAL SPECIFICATION

Series	Power Rating (Watts) @ 70°C	Voltage		TCR (ppm/°C)	Resistance Value Range (Ω) in Tolerance (%)		
		Max Working	Max Overload		±0.01%	±0.025%	±0.050%
SRN55	0.100	200	400	±3	100 ~ 100K	100 ~ 100K	100 ~ 100K
				±5, ±10	49.9 ~ 100K	49.9 ~ 100K	49.9 ~ 100K
SRN60	0.125	250	500	±3	100 ~ 100K	100 ~ 100K	100 ~ 100K
				±5	49.9 ~ 511K	49.9 ~ 511K	49.9 ~ 511K
				±10	49.9 ~ 511K	49.9 ~ 1.00M	49.9 ~ 1.00M
SRN65	0.250	300	600	±3	100 ~ 100K	100 ~ 100K	100 ~ 100K
				±5	49.9 ~ 511K	49.9 ~ 511K	49.9 ~ 511K
				±10	49.9 ~ 511K	49.9 ~ 1.00M	49.9 ~ 1.00M
SRN70	0.500	350	700	±3	100 ~ 100K	100 ~ 100K	100 ~ 100K
				±5	49.9 ~ 1.00M	49.9 ~ 1.00M	49.9 ~ 1.00M
				±10	49.9 ~ 1.00M	49.9 ~ 1.00M	49.9 ~ 3.52M

CHARACTERSTICS

ITEM	TEST METHOD	REQUIREMENTS
Operating Temperature Range		-25°C to +125°C
Short Time Overload	2.5 X rated voltage; 5 seconds	± (0.05% + 0.01Ω)
Insulation Resistance	100V or 500V; 1 minute	100,000MΩ or more
Dielectric withstanding Voltage	SRN55, SRN60: 450V SRN65, SRN70: 900V } for 1 minute	± (0.05% + 0.01Ω)
Terminal Strength	Pull 10 seconds; Twist 360°, 5 times SRN55, SRN60, SRN65: 10N and SRN70: 25N	± (0.02% + 0.01Ω)
Vibration	10 to 2,000Hz, 1.5 mm or 20G, 2 directions; total 8 hours	± (0.05% + 0.01Ω)
Resistance to Soldering Heat	350 ± 10°C, 3 seconds	± (0.05% + 0.01Ω)
Low Temperature Operation	-65°C, rated voltage 45 minutes	± (0.05% + 0.01Ω)
Thermal Shock	-65°C, -150°C for 5 cycles	± (0.05% + 0.01Ω)
Moisture Resistance	65°C, 90 ~ 95% R.H. -10°C, 10 cycles	± (0.2% + 0.01Ω)
Moisture Resistance Load Life	40°C, 90 ~ 95% R.H. rated voltage, 1,000 hours	± (0.2% + 0.01Ω)
Load Life at 70°C	70°C, rated voltage, 1.5 hours on, 0.5 hours off, 1,000 hours	± (0.2% + 0.01Ω)

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