

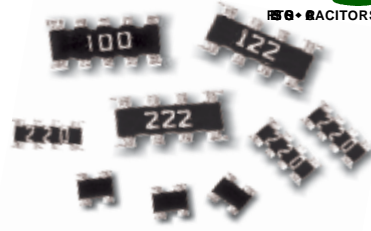
THICK FILM CONVEX CHIP ARRAYS

SMN SERIES Resistor Arrays

ZMN SERIES Jumper Arrays



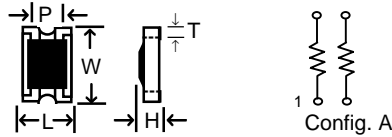
Term.W is
RoHS
compliant
& 260°C
compatible



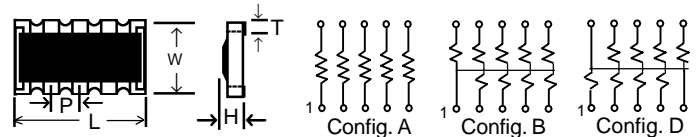
- ☐ Internationally popular convex termination pads
- ☐ Industry's widest selection and lowest cost!
- ☐ 1Ω to 10MΩ, 0.5% to 5%, 8 sizes, 3 circuit schematics
- ☐ 2 to 9 resistors per array reduces mounting costs
- ☐ ZMN Series zero ohm jumpers are 1Amp, 50mΩ max
- ☐ Scalloped edge design available

RCD's Series SMN resistor and ZMN jumper chip arrays not only enable significant pcb space savings, but a sizeable cost savings over the use of individual components. The savings in assembly cost, by placing a single chip instead of multiple chips, more than pays for the cost of these components. SMN/ZMN feature convex terminations, concave available (see CN Series).

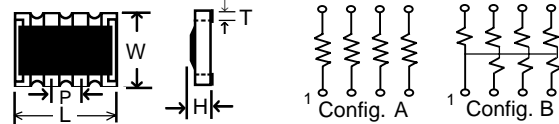
4 PIN: SMN0404, SMN0606



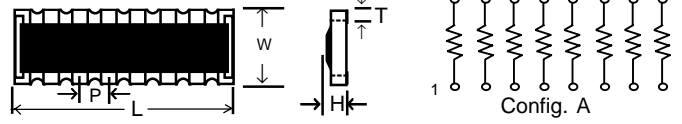
10 PIN: SMN2010, SMNN1206 (SMNN1206 avail. in Config. D only)



8 PIN: SMN0804, SMN1206, SMN2012



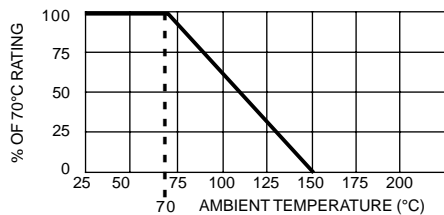
16 PIN: SMN1506



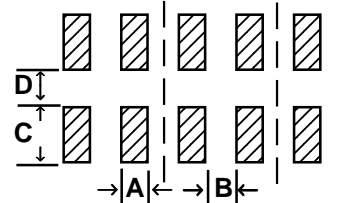
RCD Type	Config	Rated Power*	Working Voltage	TC (ppm/°C)	Res. Range 0.5% Tol	Res. Range 1% Tol	Res. Range 2 & 5% Tol	L ±.01 [.25]	W±.008 [.2]	P±.008 [.2]	H±.006 [.15]	T typ.
SMN0404	A	62mW	25V	250ppm	**	**	10Ω - 1M	.039 [1]	.039 [1]	.025 [.65]	.016 [.4]	.010 [.25]
SMN0606	A	62mW	50V	200ppm	**	**	1Ω - 10M	.063 [1.6]	.063 [1.6]	.0315 [.8]	.022 [.55]	.012 [.3]
SMN0804	A	62mW	25V	250ppm	**	**	10Ω - 1M	.079 [2]	.039 [1]	.02 [.5]	.016 [.4]	.010 [.25]
SMN1206	A	62mW	50V	200ppm	22Ω-470K	1Ω - 10M	1Ω - 10M	.126 [3.2]	.063 [1.6]	.0315 [.8]	.022 [.55]	.010 [.25]
SMNN1206	D	31mW	25V	200ppm	**	**	10Ω - 1M	.126 [3.2]	.063 [1.6]	.025 [.64]	.022 [.55]	.010 [.25]
SMN1506	A	62mW***	25V	200ppm	**	**	10Ω - 1M	.154 [3.9]	.063 [1.6]	.02 [.5]	.018 [.45]	.012 [.3]
SMN2010	A	100mW	50V	200ppm	**	**	10Ω - 1M	.200 [5.08]	.100 [2.54]	.040 [1.0]	.024 [.6]	.010 [.25]
SMN2010	B	55mW	50V	200ppm	**	**	10Ω - 1M	.200 [5.08]	.100 [2.54]	.040 [1.0]	.024 [.6]	.010 [.25]
SMN2012	A	125mW	50V	200ppm	**	**	22Ω - 1M	.200 [5.08]	.122 [3.10]	.050 [1.27]	.024 [.6]	.012 [.30]
SMN2012	B**	62mW	50V	200ppm	**	**	10Ω - 1M	.200 [5.08]	.122 [3.10]	.050 [1.27]	.024 [.6]	.012 [.30]

* Rated power is per resistor element at 70°C ** Consult factory for availability *** SMN1506 package power rating is .25W

DERATING



SUGGESTED PAD LAYOUT



RCD Type	A	B	C	D
SMN0404 (4-pin)	.014 [.36]	.011 [.28]	.020 [.5]	.020 [.5]
SMN0606 (4-pin)	.016 [.4]	.016 [.4]	.032 [.8]	.036 [.9]
SMN0804 (8-pin)	.012 [.3]	.008 [.2]	.020 [.5]	.020 [.5]
SMN1206 (8-pin)	.018 [.45]	.014 [.36]	.032 [.8]	.036 [.9]
SMNN1206 (10-pin)	.014 [.36]	.011 [.28]	.032 [.8]	.036 [.9]
SMN1506 (16-pin)	.012 [.3]	.008 [.2]	.032 [.8]	.039 [.9]
SMN2010 (10-pin)	.022 [.55]	.018 [.45]	.040 [1]	.060 [1.5]
SMN2012 (8-pin)	.032 [.82]	.018 [.45]	.045 [1.1]	.080 [2]

TYPICAL PERFORMANCE CHARACTERISTICS

Operating Temp. Range	-55°C to +150°C
Short time Overload (2.5X rated W, 5 sec)	±2%+0.1Ω max.
Resistance to Solder Heat (260°C, 10 sec)	±1%+0.1Ω max.
Moisture Res. (90-95% RH, 40°C, 100 hrs)	±3%+0.1Ω max.
High Temp. Exposure (125°C, 100 hrs)	±1%+0.1Ω max.
Load Life (1000 hrs at rated W)	±3%+0.1Ω max.
Insulation Resistance	10,000 Megohm
Dielectric Withstanding Voltage	400V

P/N DESIGNATION: SMN 2010 A - 102 - J T W

Type (SMN, SMNN or ZMN) | Chip Size | Circuit Configuration: A, B, D | Resis.Code 1%: 3 signif. figures & multiplier, e.g. 1R00=1Ω, 10R0=10Ω, 1000=100Ω, 1001=1KΩ, etc. Resis.Code 2%-5%: 2 signif. figures & multiplier, e.g. 1R0=1Ω, 100=10Ω, 101=100Ω, 102=1KΩ, etc. Leave blank on ZMN zero-ohm jumper arrays (.05Ω max) | Tolerance Code: J=5%(std), G=2%, F=1%, D=0.5% Leave blank on ZMN zero-ohm jumper arrays | Packaging: B = Bulk, T = Tape & Reel | Termination: W= Lead-free (standard), Q= Tin/Lead (leave blank if either is acceptable)