SURFACE MOUNT RESISTOR NETWORKS



Mini-Systems, Inc. **RSMA** Style mini-surface mount thin film resistor networks feature a **smaller footprint** than QSOP packages. This series is offered in a 0.025" and 0.050" lead pitch. They provide **high stability, low noise, tight tolerance, and ratio tracking**, low TCR and TC tracking of Mini-Systems, Inc. proven thin film process. Combining resistors maximizes on available space and reduces the number of connections. They are available in 8, 14 and 16 lead configurations.

MECHANICAL DATA

Package Style	SMT, Epoxy Coated			
Package Configuration				
Lead Pitch	0.025" (RSMA25) 0.050" (RSMA50)			
Lead Material	Palladium Silver (Standard) - Solder Tinned (Optional)			

GENERAL CHARACTERISTICS

TCD	Standard	Available To				
TCR	±150ppm/°C	±5ppm/°C				
Power Rating ¹	50 mW/Resistor					
Voltage Rating	100 V					
Resistance Range	5Ω to $1 \mathrm{M}\Omega$					
Resistance Tolerance	±0.5% to ±10%					
Current Noise	<-30dB Typical					
Storage Temperature	-65°C to +150°C					
Operating Temperature	-55°C to +150°C					
Insulation Resistance	$10^{12}\Omega$ Min,					

 $^{^{\}rm 1}$ Power Rating at 70°C Derated Linearly to 0% at 150°C

PART NUMBER DESIGNATION

RSMA50	_ 16	SA ·	10002		AU
STYLE	# LEADS	SCHEMATIC	OHMIC VALUE	TOLERANCE	OPTION
See Table	See Table	SA = Isolated SB = Common SC = Series SD = Divider	1st 4 digits are significant with "R" as decimal point when required. 5th digit represents number of zeros.	$F = \pm 1\%$ $G = \pm 2\%$	D = ±5ppm/°C C = ±10ppm/°C B = ±25ppm/°C A = ±50ppm/°C F = ±100ppm/°C U = Pd/Ag Untinned
EXAMPLE:	RSMA50-16SA 16 Lead Pkg., 8		Isolated Connections,		T = Pd/Ag w/Sn62 Solder T3 = Pd/Ag w/SAC305 Solder TR = Tape & Reel

Custom Networks and Resistor Combinations Available Consult Sales

±1% Tol., ±50ppm/°C, Pd/Ag Untinned



THIN FILM DIVISION

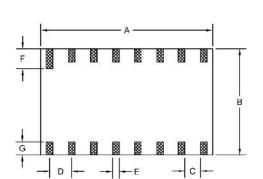
ISO 9001 CERTIFIED 20 DAVID ROAD

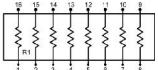
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SURFACE MOUNT RESISTOR NETWORKS

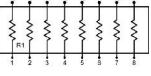


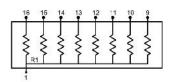




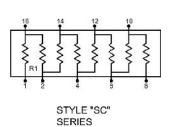
STYLE "SA"

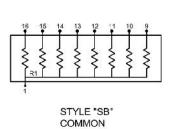
ISOLATED





STYLE "SB" COMMON





RSMA 25

		Dimensions							
CASE SIZE	LEADS	A (±0.005") [±0.127mm]	B (±0.005") [±0.127mm]	С	D	E (±0.002") [±0.050mm]	F	G	H (±0.005") [±0.127mm]
1515	8	0.150" [3.810]	0.150" [3.810]	0.010" [0.254]	0.025" [0.635]	0.015" [0.381]	0.045" [1.143]	0.025" [0.635]	0.050" [1.270]
1518	14	0.175" [4.445]	0.150" [3.810]	0.010" [0.254]	0.025" [0.635]	0.015" [0.381]	0.045" [1.143]	0.025" [0.635]	0.050" [1.270]
1520									

RSMA 50

RSMA SV									
		Dimensions							
CASE SIZE	LEADS	A (±0.005") [±0.127mm]	B (±0.005") [±0.127mm]	С	D	E (±0.002") [±0.050mm]	F	G	H (±0.005") [±0.127mm]
2419	8	0.190" [4.826]	0.240" [6.096]	0.035" [0.889]	0.050" [1.270]	0.015" [0.381]	0.045" [1.143]	0.030" [0.762]	0.050" [1.270]
2434	14	0.340" [8.636]	0.240" [6.096]	0.035" [0.889]	0.050" [1.270]	0.015" [0.381]	0.045" [1.143]	0.030" [0.762]	0.050" [1.270]
2439	16	0.390" [9.906]	0.240" [6.096]	0.035" [0.889]	0.050" [1.270]	0.015" [0.381]	0.045" [1.143]	0.030" [0.762]	0.050" [1.270]

PERFORMANCE SPECIFICATIONS

PROPERTY	TEST CONDITION	REQUIRED LIMITS	MSI TYPICAL LIMITS	
SHORT TERM OVERLOAD	2.5xWVDC(6.25xRATED POWER)MIL-PRF-55342, +25°C, 5 SEC	±0.25 MAX ΔR/R	±0.10 MAX ΔR/R	
HIGH TEMP EXPOSURE	+150°C, 100HRS	±0.20 MAX ΔR/R	±0.03 MAX ΔR/R	
THERMAL SHOCK	MIL-STD 202, METHOD 107	±0.25 MAX ΔR/R	±0.10 MAX ΔR/R	
MOISTURE RESISTANCE	MIL-STD 202, METHOD 106	±0.40 MAX ΔR/R	±0.10 MAX ΔR/R	
STABILITY	MIL-STD 202 METHOD 108, 2000 HRS, +70°C, RATED POWER	±0.50 MAX ΔR/R	±0.10 MAX ΔR/R	



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