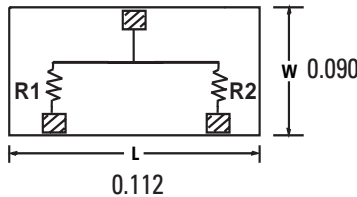
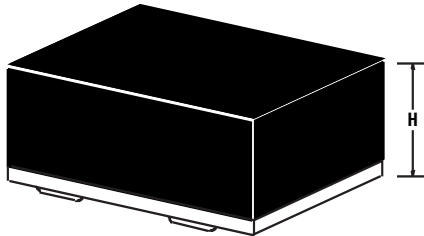


# THIN FILM SURFACE MOUNT RESISTORS

## RSMT-23

(23:) Direct Replacement for SOT-23



## MINI-SMT™ RSMT-23 SERIES RESISTOR

MINI-SMT-23™ thin film resistors offer maximum benefits in ohmic value ranges from 1Ω through 500MΩ. T.C.R.'s to ±5ppm/°C - and absolute tolerances to 0.05%. These packaged resistors provide proven thin film performance in a surface mount solderable style.

### MECHANICAL DATA

<b>SIZE: RSMT(23)</b>	0.112" x 0.090" (±0.005") x 0.050" MAX NOM.
<b>SUBSTRATE</b>	ALUMINA
<b>RESISTOR</b>	PROPRIETARY
<b>BONDING MATERIAL</b>	GOLD OR SOLDER, PALLADIUM SILVER OPTIONAL
<b>BOND PAD SIZE (23)</b>	0.018" x 0.020" ±0.003"

### ELECTRICAL DATA

<b>RESISTANCE RANGE</b>	1Ω TO 500MΩ
<b>TOLERANCES</b>	0.1%, 0.5%, 1%, 2%, 5%, 10%: TO 0.05% AVAILABLE
<b>T.C.R.</b>	±150ppm/°C STANDARD: OPTIONAL TO ±5ppm/°C ±300ppm/°C STANDARD: OPTIONAL TO ±100ppm/°C
1Ω TO 50MΩ	
50MΩ TO 500MΩ	

### SERIES DATA

<b>CURRENT NOISE</b>	101Ω TO 250KΩ: -40dB ≤ 100Ω, ≥ 250KΩ: -30dB
<b>DIELECTRIC BREAKDOWN</b>	400 V MIN.
<b>INSULATION RESISTANCE</b>	10 <sup>12</sup> Ω MIN.
<b>OPERATING VOLTAGE</b>	100 V MAX.
<b>POWER RATING</b>	250 mW (70°C DERATED LINEARLY TO 150°C) P = E <sup>2</sup> /R
<b>SHORT TERM OVERLOAD</b>	5X RATED POWER, 25°C, 5 SEC., ±0.25% MAX. ΔR/R: ±0.1% MSI TYPICAL
<b>HIGH TEMP EXPOSURE</b>	150°C, 100 HRS., ±0.25% MAX. ΔR/R: ±0.03% MSI TYPICAL
<b>THERMAL SHOCK</b>	MIL-STD 202, METHOD 107F, ±0.25% MAX. ΔR/R: ±0.1% MSI TYPICAL
<b>MOISTURE RESISTANCE</b>	MIL-STD 202, METHOD 106, ±0.5% MAX. ΔR/R: ±0.1% MSI TYPICAL
<b>STABILITY</b>	1000 HRS., 70°C, 125mW, ±0.5% MAX. ΔR/R: ±0.1% MSI TYPICAL
<b>OPERATING TEMP RANGE</b>	-55°C TO +150°C

### PART NUMBER DESIGNATION

RSMT 23	A	P	XXXX/XXXX	X	X
SERIES	SUBSTRATE	RESISTIVE FILM	OHMIC VALUE R1 / R2	TOLERANCE	OPTION DESIGNATOR (If Required)
(23): 0.112x 0.090x0.050	A = Alumina	P = Proprietary	5-Digit Number: 1st 4 Digits Are Significant With "R" As Decimal Point When Required. 5th Digit Represents Number of Zeros.	Q = 0.05%** B = 0.1%** D = 0.5% F = 1% G = 2% J = 5% K = 10%	A = ±50ppm/°C B = ±25ppm/°C** C = ±10ppm/°C** D = ±5ppm/°C** F = ±100ppm/°C T = Solder Terminations T3 = Leadfree Solder Terminations U = Untinned TR = Tape & Reel* PS = Pd Silver Bond Pads G = Gold Bond Pads RA = ±0.01% RATIO RB = ±0.05% RATIO RC = ±0.1% RATIO RE = ±0.25% RATIO RD = ±0.5% RATIO

EXAMPLES: RSMT 23 AP-50003B-CT = 0505, 5MΩ, ±0.1% Tol., ±10ppm/°C with Solder Termination.

\*CONSULT SALES FOR AVAILABILITY  
\*\*VALUE DEPENDENT

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