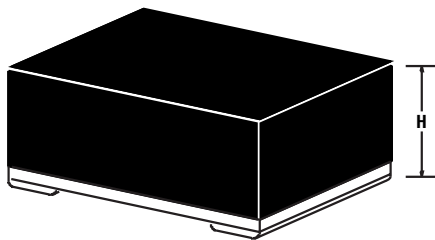


# THIN FILM SURFACE MOUNT RESISTORS

## MINI-SMT™ RSMT SERIES RESISTORS

MINI-SMT™ thin film resistors offer maximum benefits in ohmic value ranges from 1Ω through 100MΩ. T.C.R.'s to ±5ppm/°C - and absolute tolerances to 0.05%. Available in 0505, 0805, 1206 and 0603 sizes, these resistors provide proven thin film performance in a surface mount solderable style.



BOTTOM VIEW



### MECHANICAL DATA

SIZE:	0505	0.050" x 0.050" (±0.003") x 0.050" NOM.
	0805	0.080" x 0.050" (±0.003") x 0.050" NOM.
	1206	0.120" x 0.060" (±0.003") x 0.050" NOM.
	0603	0.060" x 0.030" (±0.003") x 0.050" NOM.
SUBSTRATE		ALUMINA
RESISTOR		PROPRIETARY
BONDING MATERIAL		PALLADIUM SILVER OR SOLDER, GOLD OPTIONAL
BOND PAD SIZE		
	0505	0.015" x 0.050" ±0.005"
	0805	0.015" x 0.050" ±0.005"
	1206	0.020" x 0.060" ±0.005"
	0603	0.010" x 0.030" ±0.005"

### ELECTRICAL DATA

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

### SERIES DATA

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

### PART NUMBER DESIGNATION

RSMT X	A	P	XXXXX	X	X
SERIES	SUBSTRATE	RESISTIVE FILM	OHMIC VALUE	TOLERANCE	OPTION DESIGNATOR (If Required)
1:(0505)	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

EXAMPLES: RSMT 1 AP-50003B-CT = 0505, 5MΩ, ±0.1% Tol., 10ppm/°C with Solder Termination.

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



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