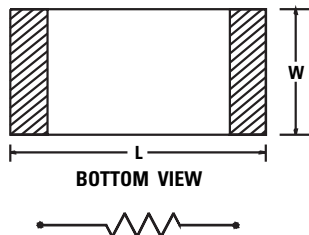
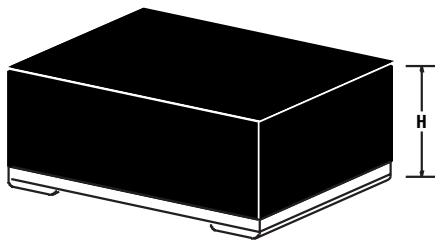


THIN FILM SURFACE MOUNT RESISTORS

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.



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 ¹² Ω MIN. |
| OPERATING VOLTAGE | 100 V MAX. |
| POWER RATING | 250 mW (70°C DERATED LINEARLY TO 150°C) P = E ² /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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