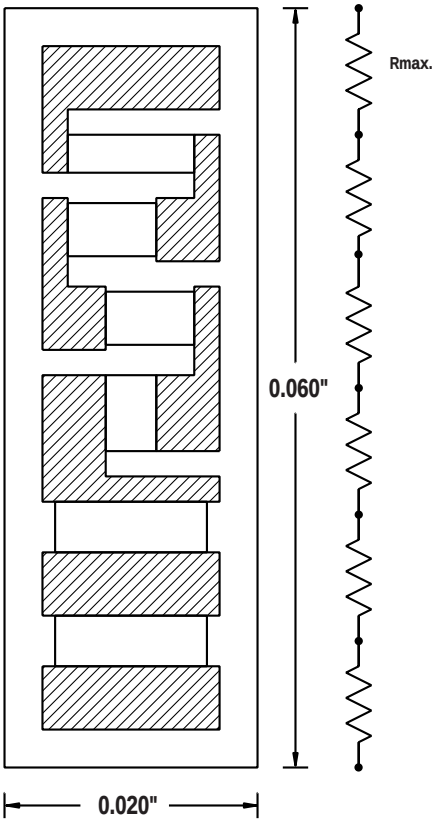
# THIN FILM MULTI-TAP RESISTORS

## MSMT 116 SERIES LOG RESISTOR




### MECHANICAL DATA

| | |
|---|---|
| SIZE | 0.060" x 0.020" x 0.010" (±0.003") |
| SUBSTRATE | SILICON OR ALUMINA |
| RESISTOR | TANTALUM NITRIDE |
| BOND PADS | 25,000 Å MINIMUM GOLD |
| BACKSIDE SURFACE | BARE SUBSTRATE<br>GOLD BACK OPTIONAL. SUITABLE FOR EUTECTIC DIE ATTACH |

### ELECTRICAL DATA

| | |
|---|---|
| RESISTANCE RANGE | 240Ω TOTAL<br>(SIX RESISTIVE ELEMENTS, 10Ω, 10Ω, 20Ω, 50Ω, 50Ω, AND 100Ω) |
| TOLERANCE | 5% OR 10% (APPLIES TO INDIVIDUAL RESISTIVE ELEMENTS) |
| T.C.R. | ±150ppm/°C STANDARD |
| NOISE | -20dB MAX |
| POWER RATING TO 70°C | 125mW |
| OPERATING VOLTAGE | 100V MAX |
| 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, 100% POWER, ±0.5% MAX. ΔR/R: ±0.1% MSI TYPICAL |
| OPERATING TEMP. RANGE | -55°C TO +125°C |

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### PART NUMBER DESIGNATION

| MSMT | X | — | T | — | XXXXX | X | — | X |
|---|---|---|---|---|---|---|---|---|
| SERIES | SUBSTRATE | | RESISTIVE FILM | | OHMIC VALUE | TOLERANCE | | OPTION DESIGNATOR |
| 116 | A = Alumina<br>S = Silicon | | T = Tantalum Nitride | | 5-Digit Number: 1st 4 Digits Are Significant With "R" As Decimal Point When Required. 5th Digit Represents Number of Zeros. | J = 5%<br>K = 10% | | GB = Gold Backside<br>G = Gold Bond Pads |

EXAMPLES: MSMT 116AT-240R0J-GB = 240Ω, ±5%
Alumina Substrate, Gold Backside.

Consult sales for other values / configurations

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