

THIN FILM MULTI-TAP RESISTORS

MSMT 117 SERIES

MECHANICAL DATA

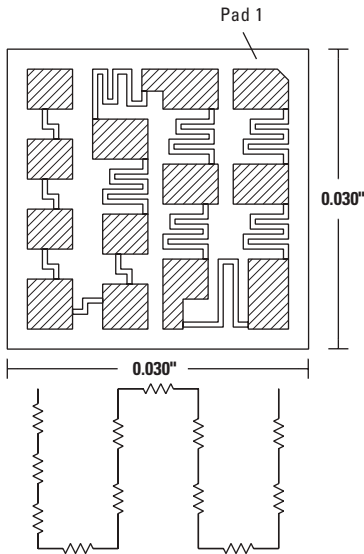
SIZE	0.030" x 0.030" x 0.010" (±0.003")
SUBSTRATE	SILICON
RESISTOR	TANTALUM NITRIDE
BOND PADS	25,000 Å MINIMUM GOLD; ALUMINUM OPTIONAL
BACKSIDE SURFACE	BARE SUBSTRATE STANDARD GOLD BACK OPTIONAL. SUITABLE FOR EUTECTIC DIE ATTACH

ELECTRICAL DATA

RESISTANCE RANGE	80Ω – 160KΩ
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OTHER VALUES AVAILABLE,
PLEASE CONSULT SALES

(THE SEVEN RESISTORS BETWEEN PADS 1 AND 8 ARE EACH 12.5% OF THE TOTAL RESISTANCE VALUE; THE FIVE RESISTORS BETWEEN PADS 8 AND 13 ARE EACH 2.5% OF THE TOTAL RESISTANCE VALUE.)



MSMT 125 SERIES

MECHANICAL DATA

SIZE	0.034" x 0.034" x 0.010" (±0.003")
SUBSTRATE	SILICON
RESISTOR	TANTALUM NITRIDE
BOND PADS	25,000 Å MINIMUM GOLD; ALUMINUM OPTIONAL
BACKSIDE SURFACE	BARE SUBSTRATE GOLD BACK OPTIONAL. SUITABLE FOR EUTECTIC DIE ATTACH

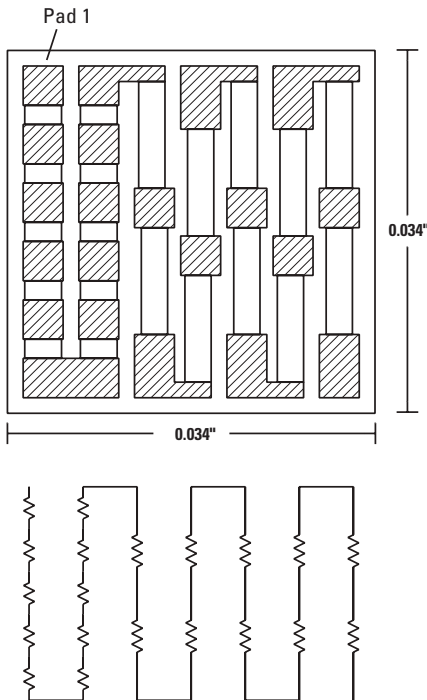
ELECTRICAL DATA

RESISTANCE RANGE	550Ω - 275KΩ
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$$\text{1st 10 Resistors} = \frac{\text{TOTAL RESISTANCE}}{110}$$

$$\text{2nd 10 Resistors} = \frac{\text{TOTAL RESISTANCE}}{11}$$

OTHER VALUES AVAILABLE, PLEASE CONSULT SALES



117 / 125 COMMON SERIES DATA

TOLERANCES	5%, 10% (APPLIES TO INDIVIDUAL RESISTIVE ELEMENTS)
T.C.R.	±150ppm/°C STANDARD
CURRENT NOISE	-30dB MAX
POWER RATING	250 mW MAX. (70°C DERATED LINEARLY TO 150°C) P = E ² /R
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

PART NUMBER DESIGNATION

MSMT XXX	X	X	XXXXX	X	X
SERIES	SUBSTRATE	RESISTIVE FILM	OHMIC VALUE	TOLERANCE	OPTION
117 125	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% K = 10%	E = Aluminum Bond Pads GB = Gold Backside G = Gold Bond Pads

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DCN TF 113-G-0306

EXAMPLE: MSMT 125-550R0K-G = 125 Series, 550Ω Total Res. Value, ±10% Tol., Gold Bond Pads Bare Backside