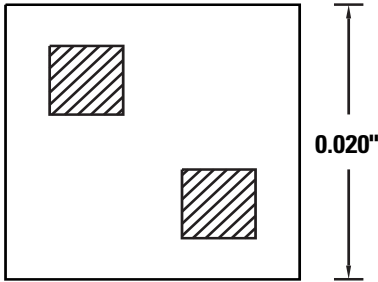


HIGH VALUE CHIP RESISTORS

SICHROME MSHR SERIES

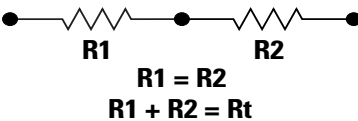
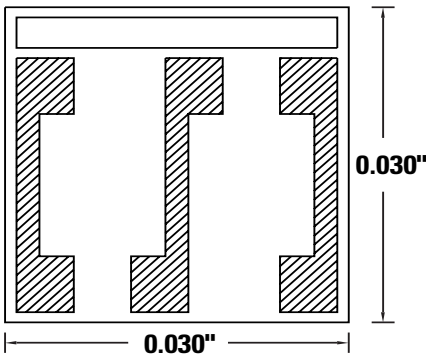


MSHR-2

SIZE 0.020" x 0.020" x 0.010" (±0.003")
RESISTANCE RANGE 1.2MΩ TO 15MΩ

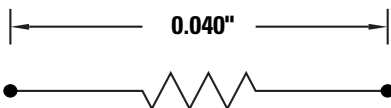
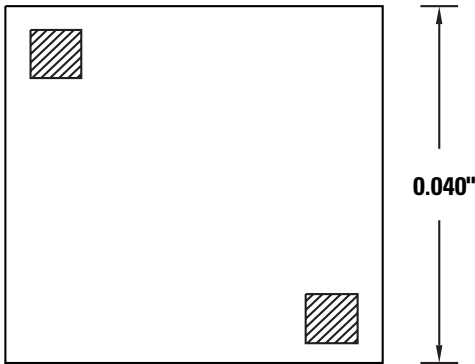
MSHR-3

SIZE 0.030" x 0.030" x 0.010" (±0.003")
RESISTANCE RANGE 2MΩ TO 25MΩ



MSHR-4

SIZE 0.040" x 0.040" x 0.010" (±0.003")
RESISTANCE RANGE 10MΩ TO 150MΩ



COMMON SERIES DATA

SUBSTRATE TYPE	SILICON
RESISTOR	SICHROME
BOND PADS	ALUMINUM (10,000 Å MIN.), OPTIONAL: GOLD (15,000 Å MIN.)
BACKSIDE SURFACE	BARE SUBSTRATE OR GOLD BACK OPTIONAL
TOLERANCES	1%, 2%, 5%, 10%, 20%
T.C.R.	STANDARD (±300ppm/°C), OPTIONAL (±100ppm/°C)
CURRENT NOISE	-20dB
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
HIGH TEMP EXPOSURE	150°C, 100 HRS., ±0.25% MAX. ΔR/R
THERMAL SHOCK	MIL-STD 202, METHOD 107F, ±0.25% MAX. ΔR/R
MOISTURE RESISTANCE	MIL-STD 202, METHOD 106, ±0.5% MAX. ΔR/R
STABILITY	1000 HRS., 70°C, 100% Power, ±0.5% MAX. ΔR/R
OPERATING TEMP RANGE	-55°C TO +150°C

PART NUMBER DESIGNATION

MSHR X	SS	XXXX	X	X
SERIES	SUBSTRATE/ RESISTOR	OHMIC VALUE	TOLERANCE	OPTION DESIGNATOR (If Required)
2	SS = Silicon/ Sichrome	5-Digit Number: 1st 4 Digits Are Significant With "R" As Decimal Point When Required. 5th Digit Represents Number of Zeros.	F = 1% G = 2% J = 5% K = 10% M = 20%	GB = Gold Backside F = ±100ppm/°C G = Gold Bond Pads E = Aluminum Bond Pads (Always used when no other option is required)
3				
4				

EXAMPLES: MSHR2SS -15003F-E = 0.020" x 0.020", Silicon Substrate
Sichrome Resistor, 1.5 MΩ, ±1% Tol., Aluminum Bond Pads.

MSHR3SS-20005F-RCE = 0.030" x 0.030", Silicon Substrate,
Sichrome Resistor, 20MΩ, ±1% Tol., ±0.1% Ratio, Aluminum Bond
Pads.

**Consult Sales department for tolerances <0.5%.



MINI-SYSTEMS, INC.

THIN FILM DIVISION

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