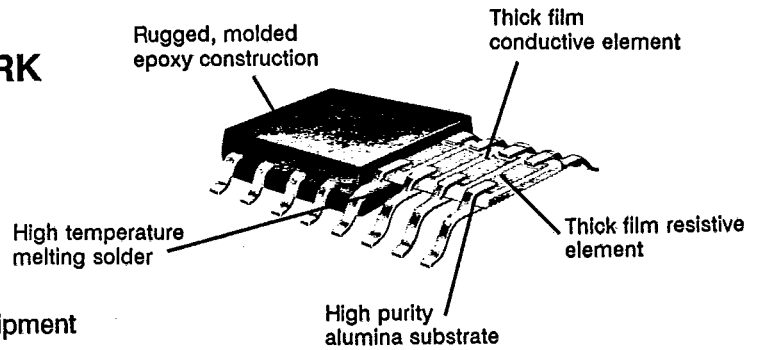




THICK FILM SMALL OUTLINE SURFACE MOUNT RESISTOR NETWORK

HM SERIES

- Designed for reflow and wave soldering techniques
- Uses less board space
- Standard JEDEC package for automatic placement equipment
- Reliable, no internal cavity, no internal wirebonds



SPECIFICATIONS:

Resistance Values: 10Ω to 1M
 Resistance Absolute Tolerance: 1%, 2%, 5%
 Temperature Coefficient of Resistance: ±100 ppm/°C, ±200 ppm/°C
 TC Tracking: 50 ppm/°C max. for equal resistance value.

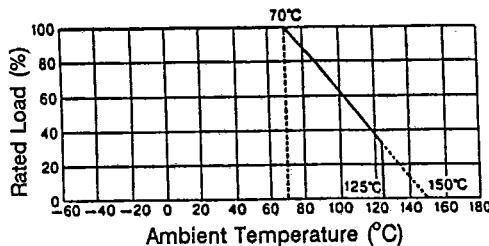
Power Rating:
 .480 watt/package - 16 pin
 .420 watt/package - 14 pin
 Operating Temperature Range: -55°C to +125°C
 Substrate: 96% pure alumina ceramic
 Lead Material: Alloy 42
 Lead Plating: Copper (1st layer) 90/10 Solder (2nd layer)

ENVIRONMENTAL CHARACTERISTICS:

Characteristics	Specifications
Thermal Shock	±.5% max. ΔR
Power Conditioning	±.5% max. ΔR
Low Temp. Operation	±0.25% max. ΔR
Short Time Overload	±0.25% max. ΔR
Terminal Strength	±0.25% max. ΔR
Resistance to Soldering Heat	±0.25% max. ΔR
Moisture	±0.5% max. ΔR
Shock	±0.25% max. ΔR
Vibration	±0.25% max. ΔR
Life	±1.0% max. ΔR
Insulation Resistance	10,000 Megohms (min)
Dielectric Withstanding Voltage	No evidence of arcing & damage
Marking Resistance to Solvents	Permanency Testing per MIL-R-83401
Solderability	Per MIL-83401

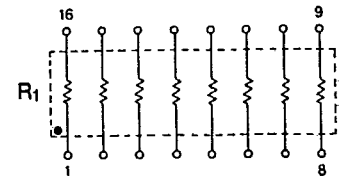
POWER DERATING CURVE:

For resistors operated in ambient temperatures above 70°C, power rating must be derating in accordance with the curve below.

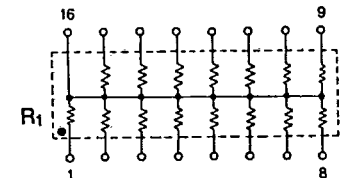


STANDARD CIRCUITS:

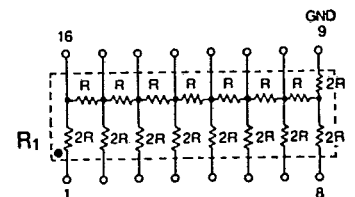
Schematic A Isolated Circuit



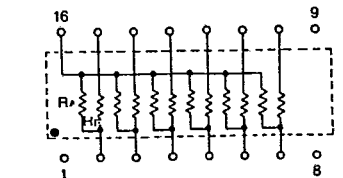
Schematic B Common Terminal Bussed Circuit



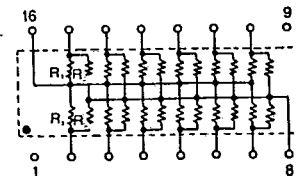
Schematic D R2R Ladder Network 4 Bits to 8 Bits Linearity: ±1/2LSB



Schematic G Voltage Divider



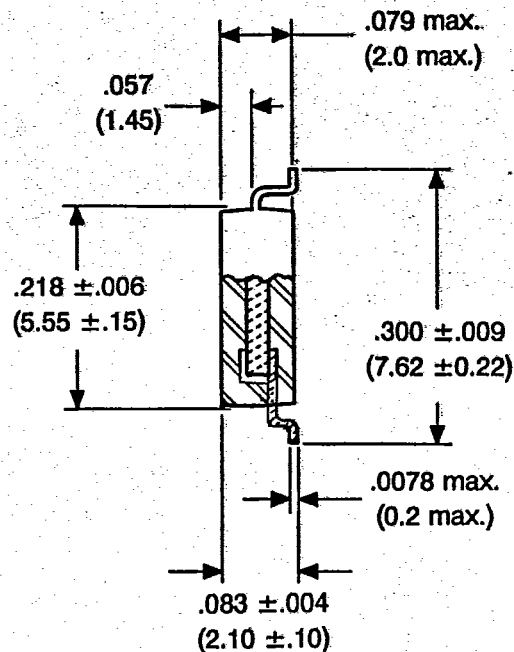
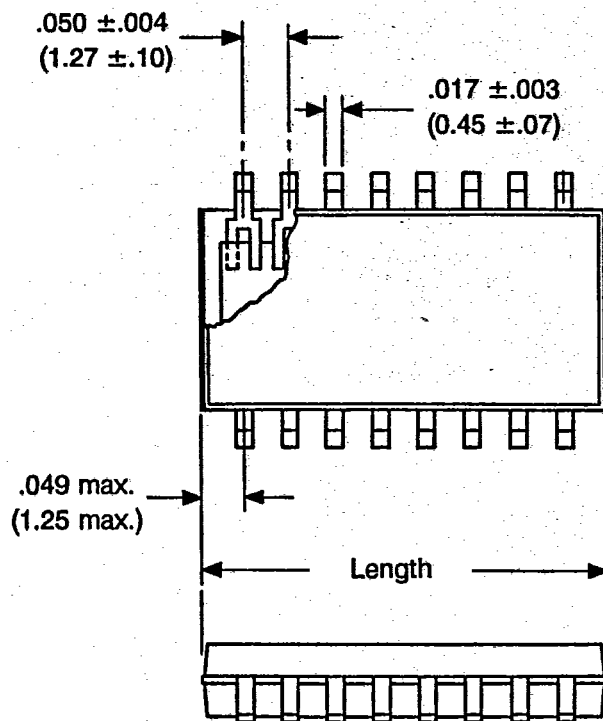
Schematic W Dual Terminator



Code	R ₁ /R ₂
T01	160/240
T02	180/390
T03	220/270
T04	220/330
T05	330/390
T06	330/470
T07	330/680
T08	1.5k/33k
T09	3k/62k



HM SERIES DIMENSIONS INCHES and (mm):



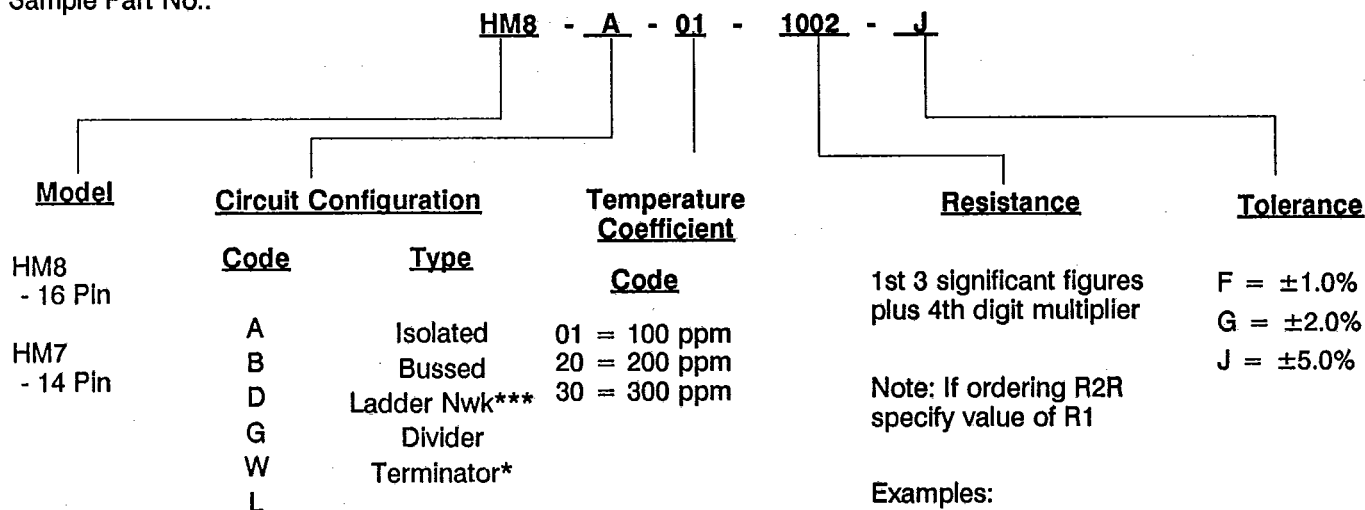
Length	16 PIN	14 PIN
	.437 ±.008 (11.1 ±.2)	.387 ±.008 (9.83 ±.2)

INCHES
(MM)

HOW TO ORDER

Sample Part No.:

HM8 - A - 01 - 1002 - J



*Use code shown for resistance value
 **Custom circuits available. Consult factory
 ***Specify value of R1 when ordering R2R
 e.g. If R1 = 10K, HM8A-01-1002J

Examples:
 2203 = 220,000 ohms
 51R0 = 51.0 ohms

Packaging: Standard packaging is 24mm embossed tape.
 Special tube packaging is available upon request.