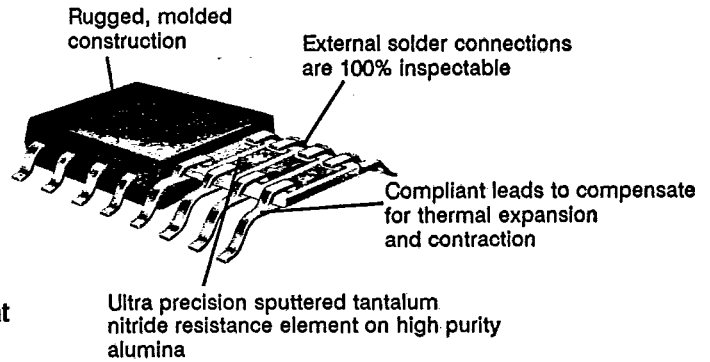




TANFILM SMALL OUTLINE SURFACE MOUNT RESISTOR NETWORK

GULL WING SERIES

- Thin Film precision
- Designed for reflow soldering techniques
- Uses less board space
- Standard JEDEC package for automatic placement equipment
- Reliable, no internal cavity, no internal wirebonds
- Full military screening available



IRC's TaNFilm, Small Outline Integrated Circuit, resistor networks are ideally suited for surface mounting. The .05 inch lead spacing provides higher lead density, increased component count, lower installed resistor cost, and better reliability. They are ideally suited for the latest surface mount assembly techniques, and each lead can be 100% visually inspected. The compliant leads relieve thermal expansion and contraction stresses created by soldering and temperature excursions.

The Tantalum Nitride film system provides precision tolerance, exceptional TCR tracking, and low noise. TaNFilm provides stability, high reliability, and long life characteristics. Testing has demonstrated performance exceeding MIL-R-83401 characteristic H.

The proven TaNFilm manufacturing process begins with our in-house CAD system for both standard and custom designs. Vacuum sputtering, exacting photoetching and laser trimming formulate the resistor network on high purity alumina ceramic.

Resistor self-passivation provides excellent environmental protection. The resistor network is high temperature soldered into a lead frame and then molded. This yields a small, rugged package with stable dimensions. It is ideal for automatic assembly using pick and place equipment.

For applications requiring precision, small size, low cost, low noise, high frequency, and high power density, specify IRC Small Outline resistor networks.

SPECIFICATIONS:

Resistance Values: 10 Ω to 100K

Resistance Absolute Tolerance:
1%, 25%, .5%, 1.0%, 2.0%

Resistance Ratio:
none standard
to .05% available

Temperature Coefficient
of Resistance:
 ± 25 , ± 50 , ± 100

TC Tracking:
5 ppm/ $^{\circ}$ C standard,
referenced to R1, 3 ppm/ $^{\circ}$ C
available

Power Rating:
(see standard circuits)

Operating Temperature Range:
-55 $^{\circ}$ C to +125 $^{\circ}$ C

Noise: Less than -25dB

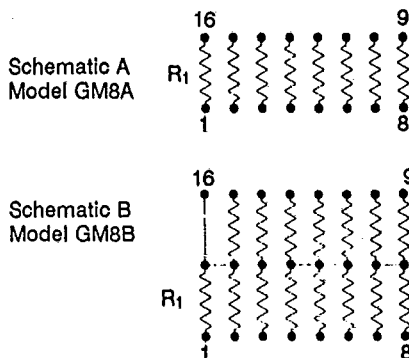
Substrate:
99.5% pure alumina ceramic

Lead material:
Copper alloy

Lead plating:
60/40 solder plated

Custom circuits and special testing available.

STANDARD CIRCUITS:

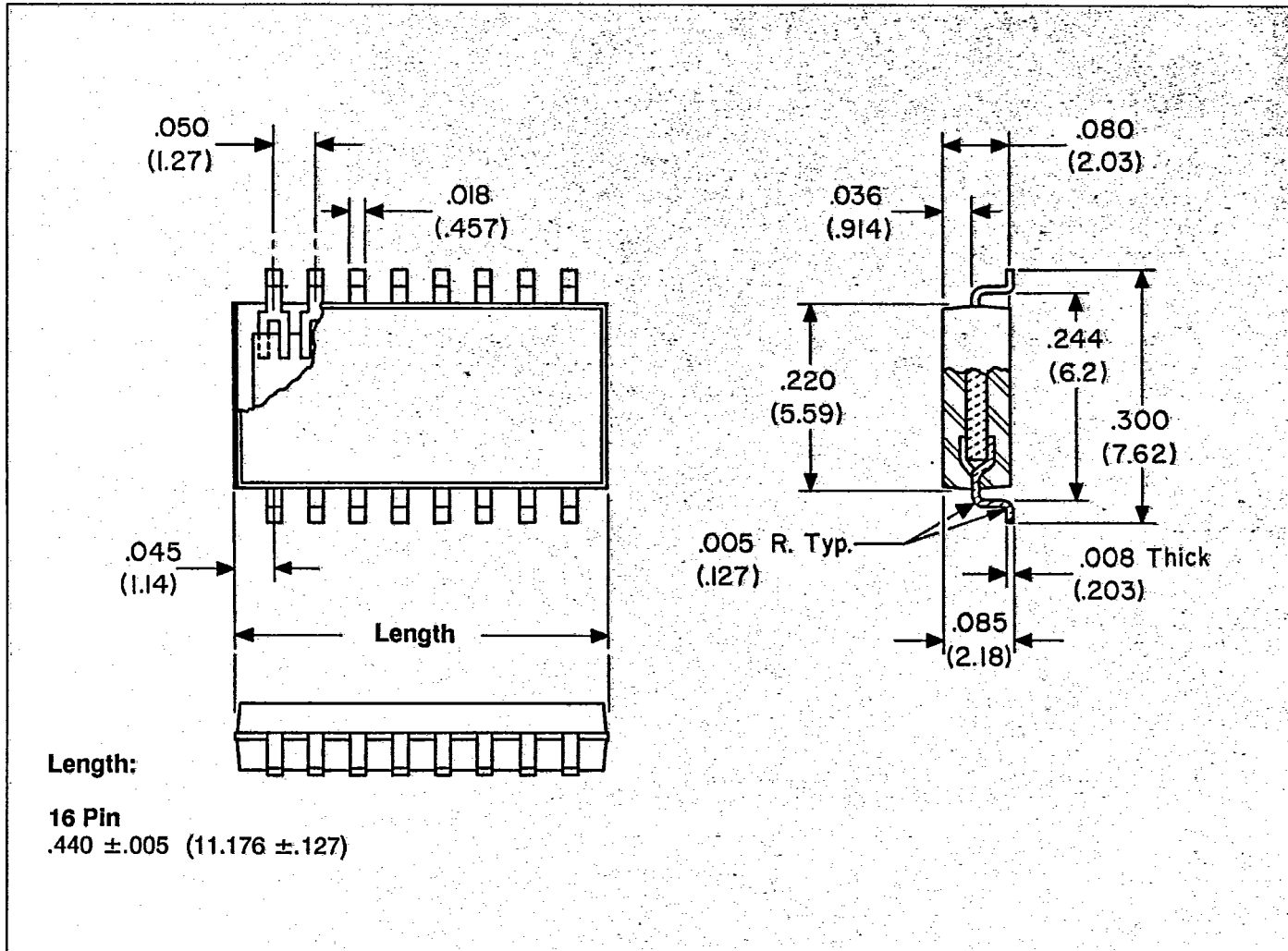


POWER DISSIPATION: (watts) at 70 $^{\circ}$ C per EIA IS-34

	Schematic A		Schematic B	
	Per Resistor	Per Package	Per Resistor	Per Package
16 pin	.16	.48	.08	.48

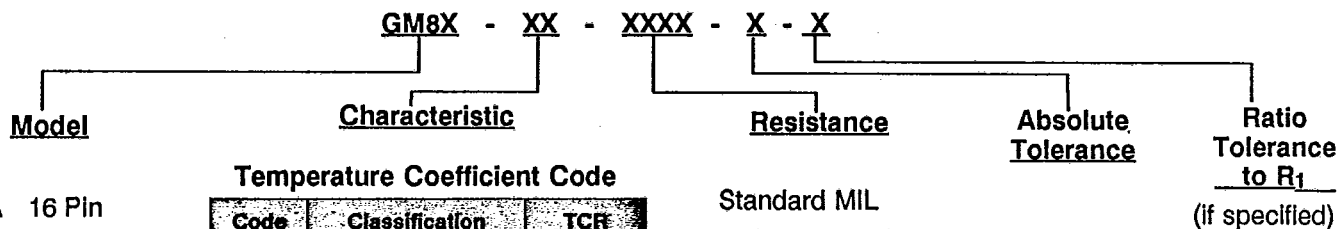


GULL WING DIMENSIONS - INCHES and (mm):



HOW TO ORDER

Sample Part No.:



GM8A 16 Pin
Schematic A

GM8B 16 Pin
Schematic B

Temperature Coefficient Code

Code	Classification	TCR
01	Commercial Grade	±100
02	Commercial Grade	±50
03	Commercial Grade	±25
04	Military Screening	±300
05	Military Screening	±100
06	Military Screening	±50
07	Military Screening	±25

Standard MIL
resistance code.

Example:
1001 = 1000 Ω

**Absolute/Ratio
Tolerance Codes:**

A ±.05%	F ±1.0%
B ±.1%	G ±2.0%
C ±.25%	T ±.01%
D ±.50%	Q ±.02%