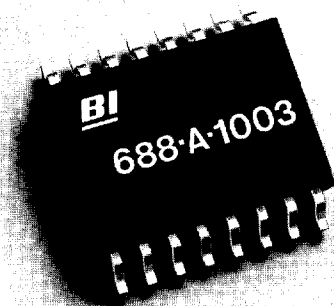


# Model 688 Surface Mount Precision Thin Film Dual In-Line .300" Resistor Network

T-62-05



## Electrical

Operating Temperature Range	-55°C to +125°C
Resistance Voltco	≈0
Interlead Capacitance	<2pF
Operating Voltage, Maximum	100V dc or √PR
Insulation Resistance, Minimum	10,000 Megohms
Noise, Maximum (Mil-Std-202, Method 308)	-40dB

## Mechanical

Lead Plating	85/15 Tin Lead
Lead Material	Copper Alloy
Lead Configuration	Gull Wing
Lead Coplanarity	0.004" (0.102mm)
Substrate Material	Alumina
Resistor Material	Nichrome
Body Material	Molded Epoxy

## Environmental

Thermal Shock plus Power Conditioning	ΔR 0.25%
Short Time Overload	ΔR 0.1%
Terminal Strength	ΔR 0.1%
Moisture Resistance	ΔR 0.2%
Mechanical Shock	ΔR 0.25%
Vibration	ΔR 0.25%
Low Temperature Storage	ΔR 0.1%
High Temperature Exposure	ΔR 0.1%
Load Life, 1,000 Hours	ΔR 0.1%
Resistance to Solder Heat	ΔR 0.1%
Dielectric Withstanding Voltage	100V for 1 minute
Temperature Exposure, Maximum	215°C for 3 minutes
Marking Permanency	per Paragraph 4.6.7
Lead Solderability	per Paragraph 4.6.6
Flammability	UL-94V-0 Rated
Storage	-65°C to +125°C

Specifications subject to change without notice.

## Tolerances

Accuracy Code	B	D	F
Absolute Resistance Tolerances, At 25°C	0.1%	0.5%	1.0%
Ratio	0.1%	0.1%	0.5%
Temperature Coefficient of Resistance	±25ppm/°C		
Temperature Coefficient of Resistance, Tracking	±5ppm/°C		

## Standard Resistance Values, Ohms\*

Model	Ohms	Code
688A	50K	5002
	100K	1003
688B	100K	1003

## Applicable Documents

MIL-R-83401 — Resistor Networks, Fixed, Film, General Specifications
MIL-STD-202 — Test Methods for Electronics and Electrical Component Parts

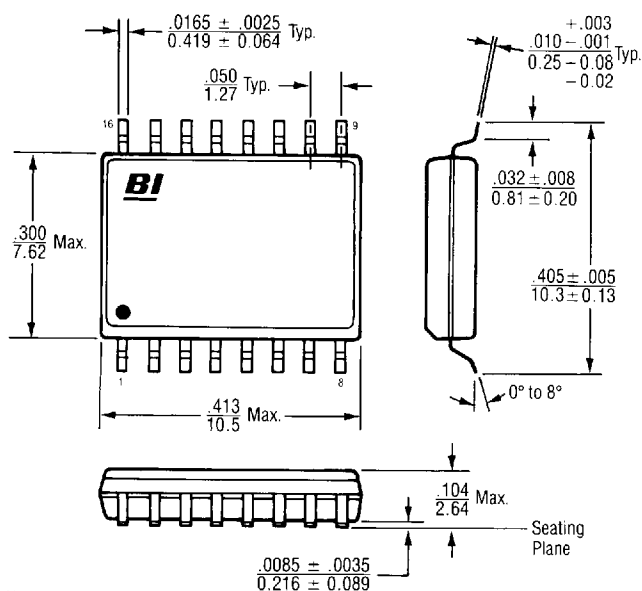
\* Consult Factory for non-standard values

# Beckman Industrial™

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# Networks

## Outline Dimensions

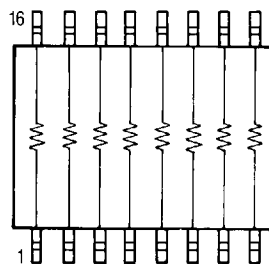


## Notes:

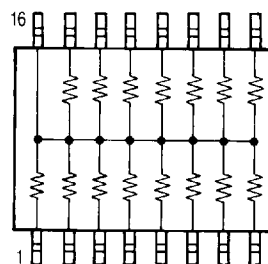
1. Leads are within .005/0.13 of true position
2. Maximum allowable mold excursion = 0.006"

## Schematics/Solder Pad Layout

688-A Isolated Resistors

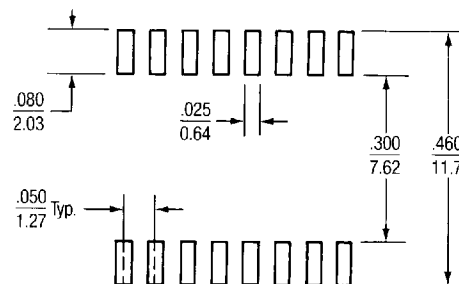


688-B Bussed Resistors

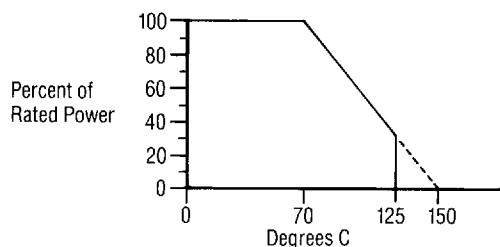


Consult factory for custom circuit configurations.

Solder Pad Layout



## Power Derating Curve



## Power (Watts) Dissipation at 70°C

Model	Package	Resistor
688	.7	.1

## Packaging

## Standard: Magazine

All units oriented with lead #1 to the same side

Magazine: Capacity = 50 units

## Option: Embossed Tape &amp; Reel

## Ordering Information

Model Series	68	8	A	5002	B	Accuracy Code
Number of Leads	8 = 16 Leads					
Circuit Type	A = Isolated B = Bussed					
	Resistance Code First 3 digits are significant Last digit denotes the number of trailing zeros					

## Typical Part Marking

