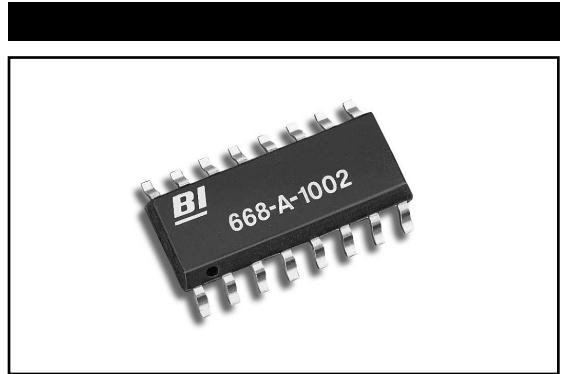


MODELS

664, 667, 668

.150" Dual In-Line Precision Thin Film Surface Mount Resistor Networks



FEATURES

- **Unique passivation coating eliminates moisture concerns** and allows for use in applications traditionally restricted to tantalum nitride
- Outperforms other thin film resistor materials providing excellent tolerances, ratio matching, temperature coefficient, and temperature tracking
- Improved performance over silicon substrates in stray capacitance, frequency response and stability

ELECTRICAL

Operating Temperature Range	-55°C to +125°C
Resistance Voltco	≈0
Interlead Capacitance	<2pF
Operating Voltage, Maximum	100Vdc or √PR
Insulation Resistance	≥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

Specifications subject to change without notice.

TOLERANCES

Accuracy Code *	A	B	D	F
Absolute Resistance Tolerances, at 25°C	0.1%	0.1%	0.5%	1.0%
Ratio Matching (Matched to R1)	0.05%	0.1%	0.1%	0.5%
Temperature Coefficient of Resistance				±25ppm/°C
Temperature Coefficient of Resistance, Tracking				±5ppm/°C

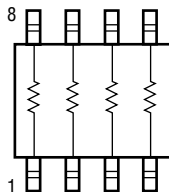
* Code 'A' Accuracy available as standard only for Model 664; other models by special order only.

ENVIRONMENTAL

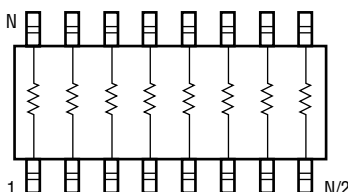
Thermal Shock plus Power Conditioning	ΔR 0.25%
Low Temperature Operation	ΔR 0.10%
Short Time Overload	ΔR 0.10%
Terminal Strength	ΔR 0.10%
Moisture Resistance	ΔR 0.20%
Mechanical Shock	ΔR 0.25%
Vibration	ΔR 0.25%
Low Temperature Storage	ΔR 0.10%
High Temperature Exposure	ΔR 0.10%
Load Life, 1,000 Hours	ΔR 0.10%
Resistance to Solder Heat	ΔR 0.10%
Dielectric Withstanding Voltage	100V for 1 minute
Temperature Exposure, Maximum	215°C for 3 minutes
Marking Permanency	MIL-STD-202, Method 215
Lead Solderability	MIL-STD-202, Method 208
Flammability	UL-94V-0 Rated
Storage temperature range	-65°C to +125°C

SCHEMATICS

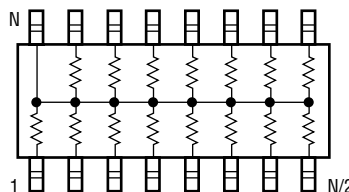
664A
Isolated Resistors



667A/668A
Isolated Resistors

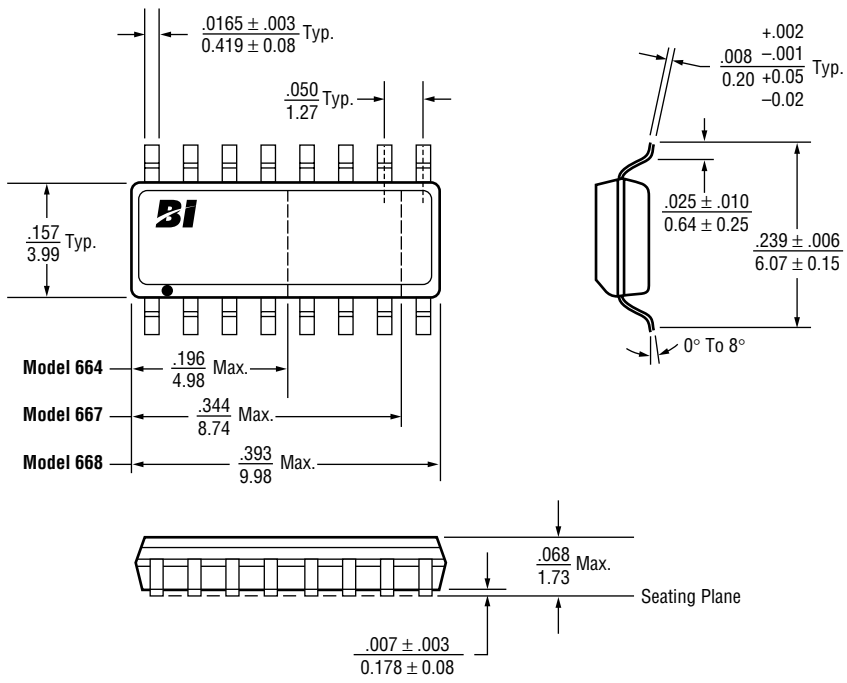


667B/668B
Bussed Resistors



Note: Model 667: N = 14 Leads, Model 668: N = 16 Leads.
Custom circuits are available. Consult factory.

OUTLINE DIMENSIONS (Inch/mm)



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

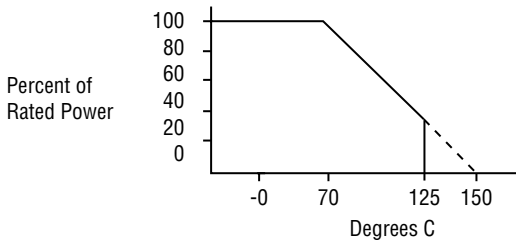
4

STANDARD RESISTANCE VALUES, OHMS

664A:	Ohms	1K	2K	5K	10K	47K	50K	100K	
	Code	1001	2001	5001	1002	4702	5002	1003	
667A,668A*:	Ohms	1K	2K	5K	10K	20K	47K	50K	100K
	Code	1001	2001	5001	1002	2002	4702	5002	1003
667B, 668B:	Ohms	10K	20K						
	Code	1002	2002						

* Code "A" accuracy available as standard for Model 664 only. Other models by special order only.

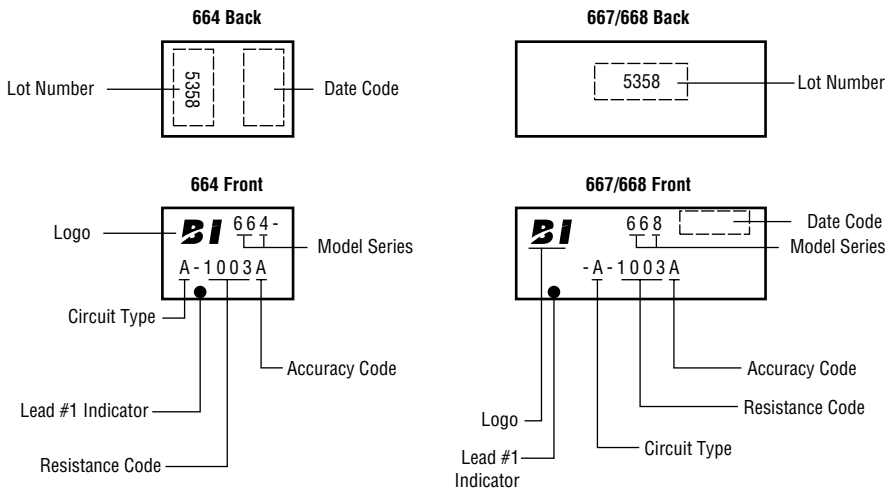
POWER DERATING CURVE



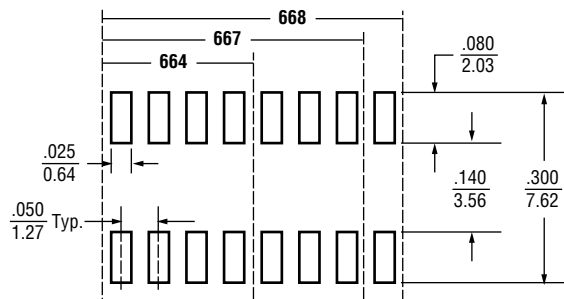
POWER DISSIPATION, (WATTS) AT 70°C

Model	Package	Resistor
664	0.4	0.1
667/668	0.5	0.1

TYPICAL PART MARKING



SOLDER PAD LAYOUT



PACKAGING

Standard: Magazines

All units oriented with lead #1 to the same side.

Magazine:	Capacity	664	=	100
		667/668	=	50

Option: Embossed Tape & Reel (per EIA 481).

Reel:	Diameter:	=	7" Reel	13" Reel	
	Capacity:	664:	=	1,000 Units	2,500 Units
		667/668:	=	500 Units	2,500 Units

ORDERING INFORMATION

