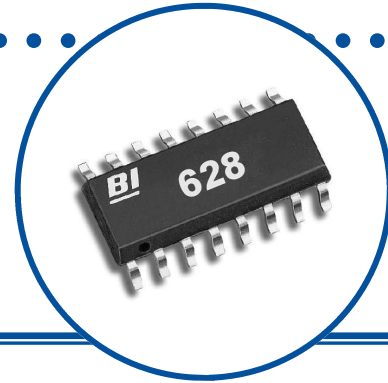


# MODELS 627, 628

## 627, 628 Series

- .220" Small Outline
- Dual-In-Line
- Thick Film
- Surface Mount
- Resistor Networks
- RoHS Compliant



### ELECTRICAL

Standard Resistance Range, Ohms	10 to 1Meg (Plus "0" Ohm Jumper)
Standard Resistance Tolerance, at 25°C	±2% (<33Ω = ±1 Ohm) (Optional: F Tol. = ±1%)
Operating Temperature Range	-55°C to +125°C
Temperature Coefficient of Resistance	±100ppm/°C (<100Ω = ±250ppm/°C)
Temperature Coefficient of Resistance, Tracking	±50ppm/°C
Maximum Operating Voltage	50Vdc or √PR
Insulation Resistance	≥10,000 Megohms

### ENVIRONMENTAL

Thermal Shock plus Power Conditioning	ΔR 0.70%
Short Time Overload	ΔR 0.25%
Moisture Resistance	ΔR 0.50%
Mechanical Shock	ΔR 0.25%
Vibration	ΔR 0.25%
Low Temperature Operation	ΔR 0.25%
High Temperature Exposure	ΔR 0.50%
Load Life, 2000 Hours (≤330Ω = ±0.5 Ohm)	ΔR 0.50%
Resistance to Solder Heat (Total Immersion in solder at 280°C for 10 sec.)	ΔR 0.25%
Dielectric Withstanding Voltage	200V 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	-55°C to +150°C

#### General Note

BI Technologies reserves the right to make changes in product specification without notice or liability

© BI Technologies Limited • Glenrothes, Fife KY7 4NX, UK  
 Telephone: +44 (0) 1592 662200 • Facsimile: +44 (0) 1592 662299 • Website: www.bitechnologies.com • Email: sales@bitechnologies.co.uk



A subsidiary of TT electronics plc  
 627, 628 Series Issue Nov 2008

# MODELS 627, 628

## MECHANICAL

Lead Material	96-96.5%Sn, 3.5-4%Ag
Lead Configuration	Gull Wing
Lead Coplanarity	±0.002 in. (0.051mm)
Substrate Material	Alumina
Resistor Material	Cermet
Body Material	Epoxy

## STANDARD RESISTANCE VALUES, OHMS

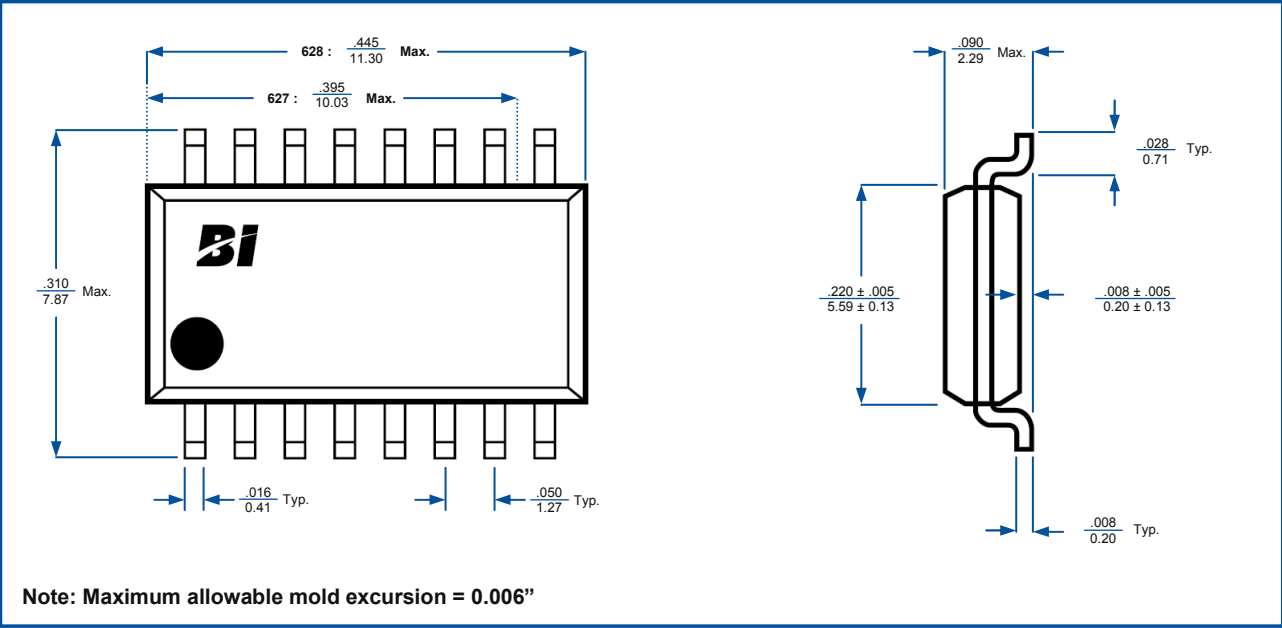
A Circuit (Isolated Resistors)					
Bold type represents stock standard values for 'A' Circuit					
Ohms	Code	Ohms	Code	Ohms	Code
<b>22</b>	<b>220</b>	1.2K	122	39K	393
<b>33</b>	<b>330</b>	1.5K	152	<b>47K</b>	<b>473</b>
39	390	1.8K	182	56K	563
47	470	2K	202	68K	683
56	560	2.2K	222	82K	823
68	680	2.7K	272	<b>100K</b>	<b>104</b>
82	820	3.3K	332	120K	124
<b>100</b>	<b>101</b>	3.9K	392	150K	154
120	121	<b>4.7K</b>	<b>472</b>	180K	184
150	151	5.6K	562	220K	224
180	181	6.8K	682	270K	274
<b>220</b>	<b>221</b>	8.2K	822	330K	334
270	271	<b>10K</b>	<b>103</b>	390K	394
<b>330</b>	<b>331</b>	12K	123	470K	474
390	391	15K	153	560K	564
<b>470</b>	<b>471</b>	18K	183	680K	684
560	561	20K	203	820K	824
680	681	22K	223	1 Meg	105
820	821	27K	273		
<b>1K</b>	<b>102</b>	33K	333		

B Circuit (Bussed Resistors)					
Bold type represents stock standard values for 'B' Circuit					
Ohms	Code	Ohms	Code	Ohms	Code
22	220	1.2K	122	39K	393
33	330	<b>1.5K</b>	<b>152</b>	<b>47K</b>	<b>473</b>
39	390	1.8K	182	56K	563
47	470	2K	202	68K	683
56	560	<b>2.2K</b>	<b>222</b>	82K	823
68	680	<b>2.7K</b>	<b>272</b>	<b>100K</b>	<b>104</b>
82	820	3.3K	332	120K	124
<b>100</b>	<b>101</b>	3.9K	392	150K	154
120	121	<b>4.7K</b>	<b>472</b>	180K	184
150	151	5.6K	562	220K	224
180	181	6.8K	682	270K	274
220	221	8.2K	822	330K	334
270	271	<b>10K</b>	<b>103</b>	390K	394
330	331	12K	123	<b>470K</b>	<b>474</b>
<b>390</b>	<b>391</b>	15K	153	560K	564
470	471	18K	183	680K	684
560	561	20K	203	820K	824
680	681	<b>22K</b>	<b>223</b>	1 Meg	105
820	821	27K	273		
<b>1K</b>	<b>102</b>	33K	333		

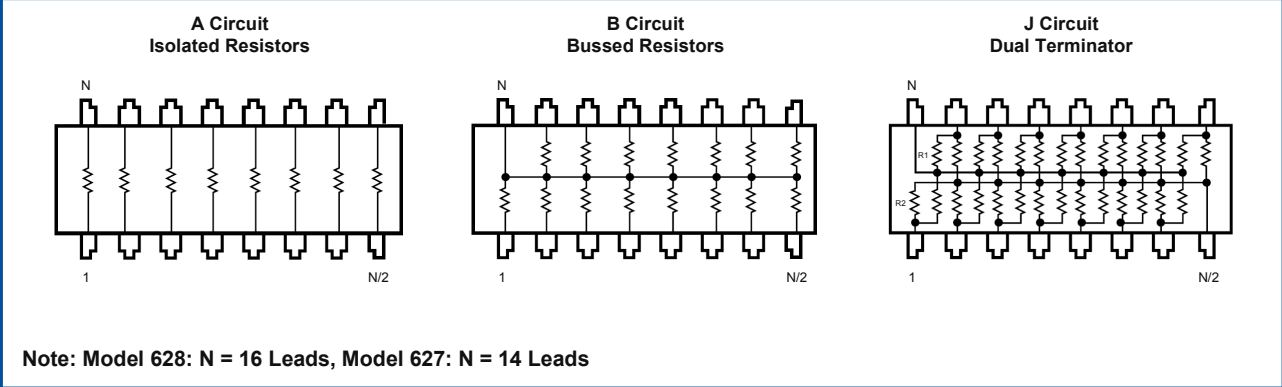
J Circuit (Dual Terminators)					
Ohms (R1/R2)	Code (R1/R2)	Marking	Ohms (R1/R2)	Code (R1/R2)	Marking
120/120	121/121	45	330/470	331/471	10
150/150	151/151	40	390/390	391/391	42
180/300	181/301	31	470/470	471/471	43
220/220	221/221	39	1K/3.3K	102/332	35
220/330	221/331	08	3K/6.2K	302/662	13
270/270	271/271	41	6.8K/22K	682/223	29
330/390	331/391	09			

# MODELS 627, 628

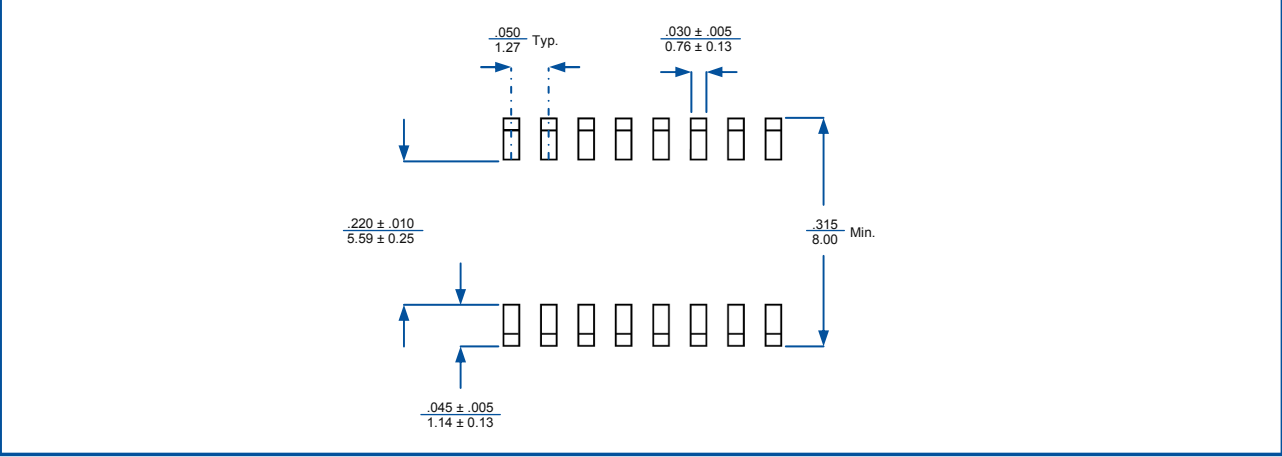
## OUTLINE DIMENSIONS (Inch/mm)



## SCHEMATICS



## SOLDER PAD LAYOUT (Inch/mm)



# MODELS 627, 628

## TYPICAL PART MARKING

Part Number	Part Marking
628A330	8A330
628A331	8A331
628J221/331	8J08

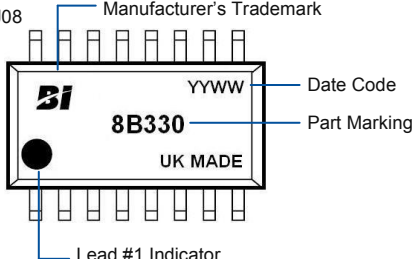
  


Diagram labels: Manufacturer's Trademark (BI logo), Date Code (YYWW), Part Marking (8B330), UK MADE, Lead #1 Indicator (black dot).

## POWER DISSIPATION, WATTS AT 70°C

— Resistor (Per Circuit) —

Model	Package	A	B	J
627	1.28	0.32	0.16	0.16
628	1.28	0.32	0.16	0.16

## PACKAGING

**Standard:** Tape & Reel  
 Conforms to requirements of EIA-481.  
 All units orientated with lead #1 to the left of direction of feed.

Tape:	Width	=	24mm
	Pocket	=	Embossed Plastic, Antistatic
	Pitch	=	12mm
Reel:	Diameter	=	13" (300mm) Maximum
	Capacity	=	2,000 Units

**Option:** Magazines  
 Conforms to EIA and JEDEC standards.  
 All units orientated with lead #1 to the same side.

Magazine:	Capacity	=	50 Units
-----------	----------	---	----------

# MODELS 627, 628

## APPLICABLE DOCUMENTS

MIL-R-914 - Resistor Networks, Fixed, Film, Surface Mount Established Reliability General Specifications

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes

MIL-STD-202 - Test Methods for Electronics and Electrical Component Parts

EIA-481 - Carrier Taping of Surface Mount Components for Automatic Handling

EIA-PDP-100 - SOGN-0002 Outline Dimensions

## ORDERING INFORMATION

