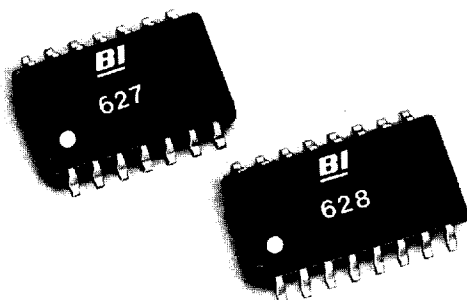




Model 627, 628 Surface Mount Small Outline Dual In-Line

Thick Film Resistor Network

T-62-05

Electrical

Standard Resistance Range, Ohms	22 to 1Meg
Standard Resistance Tolerance, at 25°C	A & B Circuits: $\pm 2\%$ ($< 33 \text{ Ohms} = \pm 10\text{hm}$) J Circuit: $\pm 5\%$
Operating Temperature Range	-55°C to +125°C
Temperature Coefficient of Resistance	$\pm 100\text{ppm}/^\circ\text{C}$ ($< 100 \text{ Ohms} = \pm 250\text{ppm}/^\circ\text{C}$)
Temperature Coefficient of Resistance Tracking	$\pm 50\text{ppm}/^\circ\text{C}$
Maximum Operating Voltage	50V dc or $\sqrt{\text{PR}}$
Insulation Resistance, Minimum	10,000 Megohms

Mechanical

Lead Material	Copper Alloy, 60/40 Tin-Lead (Dipped)
Lead Configuration	Gull Wing
Lead Coplanarity	$\pm 0.002 \text{ in. (0.057mm)}$
Substrate Material	Alumina
Resistor Material	Cermet
Body Material	Epoxy

Environmental

Thermal Shock plus Power Conditioning	$\Delta R 0.70\%$
Short Time Overload	$\Delta R 0.25\%$
Terminal Strength	$\Delta R 0.25\%$
Moisture Resistance	$\Delta R 0.50\%$
Mechanical Shock	$\Delta R 0.25\%$
Vibration Shock	$\Delta R 0.25\%$
Low Temperature Storage	$\Delta R 0.25\%$
High Temperature Exposure	$\Delta R 0.50\%$
Load Life, 1,000 Hours ($\leq 330\text{Ohms} = \pm 10\text{hm}$)	$\Delta R 1.00\%$
Resistance to Solder Heat (Per Mil-Std-202, Method 210, Cond.B)	$\Delta R 0.25\%$
Dielectric Withstanding Voltage	200V 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	-55°C to +150°C

Specifications subject to change without notice.

Standard Resistance Values, Ohms

A Circuit (Isolated Resistors) and B Circuits (Bussed Resistors)

Ohms	Code	Ohms	Code	Ohms	Code
22	220	1.2K	122	39K	393
33	330	1.5K	152	47K	473
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	100K	104
82	820	3.3K	332	120K	124
100	101	3.9K	392	150K	154
120	121	4.7K	472	180K	184
150	151	5.6K	562	22K	224
180	181	6.8K	682	270K	274
220	221	8.2K	822	330K	334
270	271	10K	103	390K	394
330	331	12K	123	470K	474
390	391	15K	153	560K	564
470	471	18K	183	680K	684
560	561	20K	203	820K	824
680	681	22K	223	1Meg	105
820	821	27K	273		
1K	102	33K	333		

J Circuit (Dual Terminators)

Ohms	Code	Marking	Ohms	Code	Marking
R1/R2	R1/R2		R1/R2	R1/R2	
180/390	181/391	06	330/470	331/471	10
220/270	221/271	07	3K/6.2K	330/622	13
220/330	221/331	08			

Applicable Documents

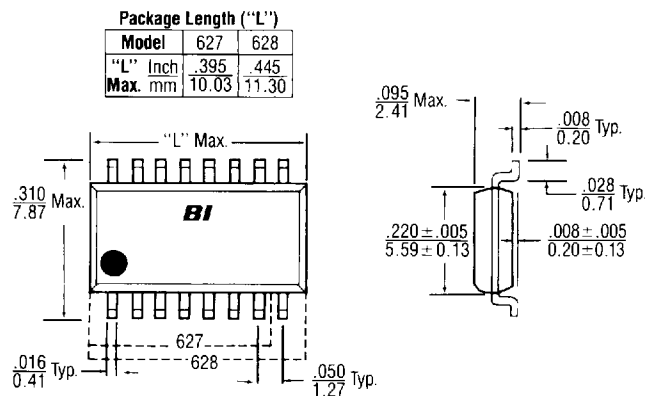
MIL-R-83401 — Resistor Networks, Fixed, Film, General Specifications
MIL-STD-105 — Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-202 — Test Methods for Electronics and Electrical Component Parts
RS-481-A — Packaging Specifications: Tape & Reel, Magazine
EIA-PDP-100 — SOGN-0002 Outline Dimensions

Beckman Industrial™

Affiliate of Emerson Electric Co.

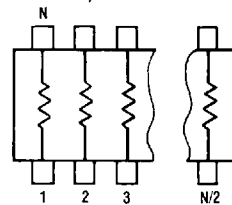
Networks

Outline Dimensions

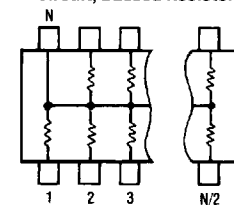


Schematics/Solder Pad Layout

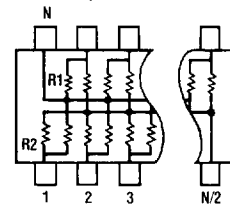
A-Circuit, Isolated Resistors



B-Circuit, Bussed Resistors

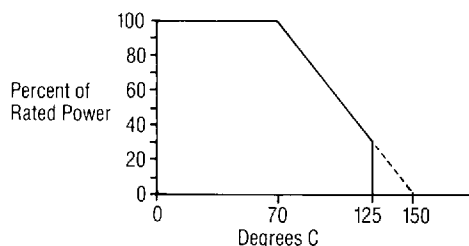


J-Circuit, Dual Terminator



627: N = 14 Leads 628: N = 16 Leads

Power Derating Curve



Power Dissipation, Watts at 70°C

Model	Package	Resistor (Per Circuit)		
		A	B	J
627	1.28	0.32	0.16	0.16
628	1.28	0.32	0.16	0.16

Packaging

Standard: Magazine

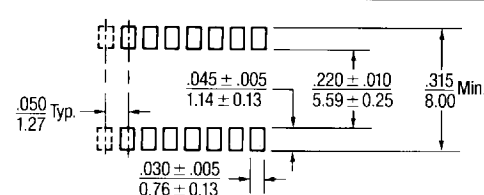
Conforms to EIA and JEDEC standards.
All units oriented with lead #1 to the same side
Magazine: Capacity = 50 units

Option: Tape & Reel

Conforms to requirements of RS-481-A
All units oriented with lead #1 to the left of direction of feed

Tape:	Width	=	24mm
	Pocket	=	Embossed Plastic, Antistatic
	Pitch	=	12mm
Reel:	Diameter	=	14" (356mm) Maximum
	Capacity	=	2,000 units

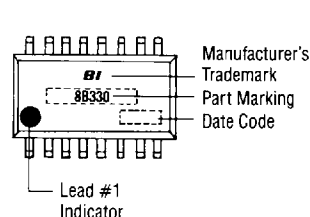
Solder Pad Layout



Ordering Information

Model Series: 62 8 J 330 / 470 F TR4
Number of Leads: 7 = 14 Leads, 8 = 16 Leads
Circuit Type: A = Isolated, B = Bussed, J = Dual Terminator
Resistance Code: First 2 digits are significant (First 3 digits for ±1%), Last digit denotes the number of trailing zeros
Tape & Reel Option: 4 = 24mm
Tolerance Code (if other than standard): F = ± 1%, G = ± 2%, J = ± 5%
R2 Resistance Code (Add for J Circuit only)

Typical Part Marking



Part Number:	Part Marking:
628A330	8A330
628B330JTR	8B330J
628J221/331	8J08
628J221/331GTR	8J08G