

Model L-Series Single In-Line Low Profile Conformal

Thick Film Resistor Network

Electrical

Standard Resistance Range, Ohms	22 to 1Meg
Standard Resistance Tolerance, at 25°C	± 2%
Operating Temperature Range	-55°C to 125°C
Temperature Coefficient of Resistance, ppm/°C ±100 (≤100 ohms = ± 250)	
Temperature Coefficient of Resistance Tracking, ppm/°C	50
Maximum Operating Voltage, Vdc	100V or √PR
Insulation Resistance, Ohms Minimum	10,000 Meg

Mechanical

Lead Material	Copper Alloy, 90/10 Tin-Lead Plating
Substrate Material	Alumina
Resistor Material	Cermet
Body Material	Conformal Epoxy Resin

Environmental (Per MIL-R-83401)

Thermal Shock Plus Power Conditioning	(ΔR) ± 0.70%
Short Time Overload	(ΔR) ± 0.50%
Terminal Strength	(ΔR) ± 0.25%
Moisture Resistance	(ΔR) ± 0.50%
Mechanical Shock	(ΔR) ± 0.25%
Vibration Shock	(ΔR) ± 0.25%
Low Temperature Storage	(ΔR) ± 0.25%
High Temperature Exposure	(ΔR) ± 0.50%
Load Life, 1000 Hour	(ΔR) ± 2.00%
Resistance to Soldering Heat (Per MIL-STD-202, Method 210, Cond. B)	(ΔR) ± 0.25%
Dielectric Withstanding Voltage	200V for 1 Minute
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

- 3 Circuit, Isolated Resistors and - 1 Circuit, Bussed Resistors							
Ohms	Code	Ohms	Code	Ohms	Code	Ohms	Code
22	220	390	391	5.6K	562	100K	104
27	270	470	471	6.8K	682	120K	124
33	330	510	511	8.2K	822	150K	154
39	390	560	561	10K	103	180K	184
47	470	680	681	12K	123	200K	204
51	510	820	821	15K	153	220K	224
56	560	1K	102	18K	183	270K	274
68	680	1.2K	122	20K	203	330K	334
82	820	1.5K	152	22K	223	390K	394
100	101	1.8K	182	27K	273	470K	474
120	121	2K	202	33K	333	510K	514
150	151	2.2K	222	39K	393	560K	564
180	181	2.7K	272	47K	473	680K	684
200	201	3.3K	332	51K	513	820K	824
220	221	3.9K	392	56K	563	1Meg	105
270	271	4.7K	472	68K	683		
330	331	5.1K	512	82K	823		

- 5 Circuit, Dual Terminators			
Ohms	Code	Ohms	Code
R1/R2	R1/R2	R1/R2	R1/R2
180/390	181/391	330/470	331/471
220/270	221/271	330/680	331/681
220/330	221/331	3K/6.2K	302/622
330/390	331/391		

Applicable Documents

MIL-R-83401—Resistor Networks, Fixed, Film, General Specification
MIL-STD-105—Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-202—Test Methods for Electronics and Electrical Components Parts

Beckman IndustrialTM

Affiliate of Emerson Electric Co.

Networks

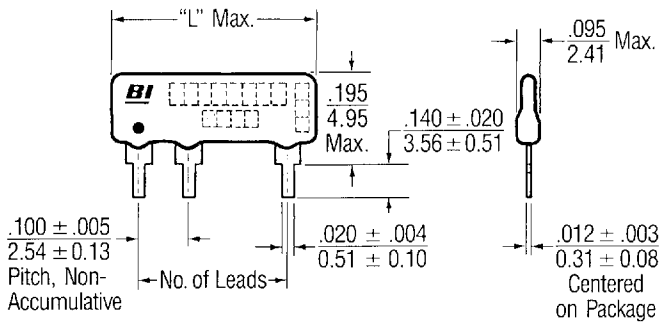
Model L-Series

BECKMAN INDSTL/ ELEC TECH 44E D

1336610 0002917 9

BIC T-62-05

Outline Dimensions Inches/mm

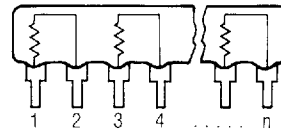


Package Length ("L")

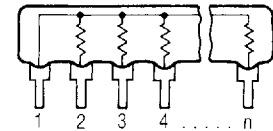
# of Leads	4	5	6	7	8	9	10	11	12	13	14
"L" in.	.40	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40
Max mm	10.16	12.70	15.24	17.78	20.32	22.86	25.40	27.94	30.48	33.02	35.56

Schematics

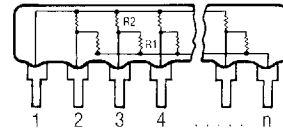
- 3 Circuit, Isolated Resistors



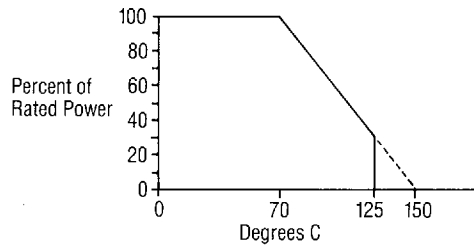
- 1 Circuit, Bussed Resistors



- 5 Circuit, Dual Terminator



Power Derating Curve



Power (Watts) Dissipation @ 70°C

Model	Package	Resistor (Per Circuit)		
		- 1	- 3	- 5
L06	.6	.125	.200	.125
L08	.8	.125	.200	.125
L10	1.0	.125	.200	.125

Packaging

Standard: Bulk

Capacity, units = 200

Option: Tape & Ammo Box (Steel pins only)

All units oriented with lead #1 to the left of direction of feed.

Tape Width = 18mm
Pitch = 12.7mm

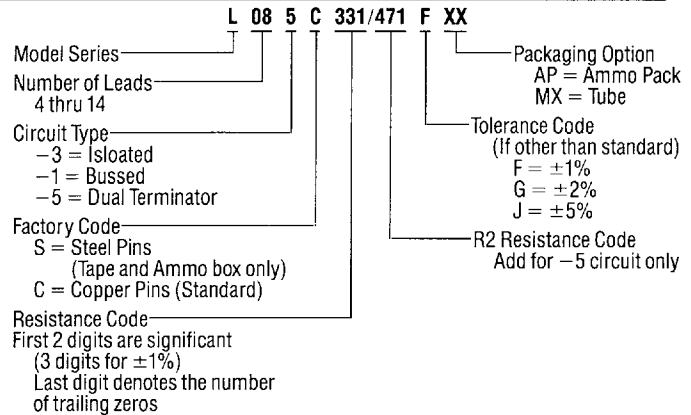
Ammo Box Capacity, units = 1000

Option: Magazine

Dimensions conform to EIA & JEDEC Standards
All units oriented with lead #1 to the same side.

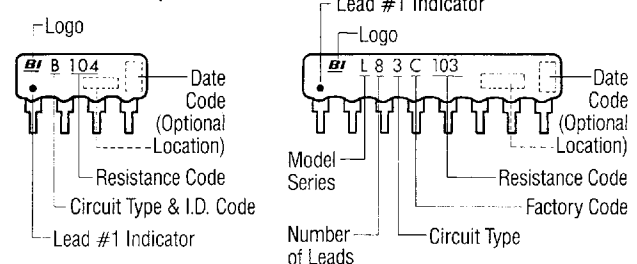
Magazine Material = Anti-Static Plastic

Ordering Information



Typical Part Marking

4 Leads Only



WORLDWIDE HEADQUARTERS
Beckman Industrial Corp.
Affiliate of Emerson Electric Co.
4141 Palm Street
Fullerton, CA 92635-1025
Telephone: (714) 447-2345
Fax: (714) 447-2500

EUROPEAN HEADQUARTERS
Beckman Industrial Ltd.
Queensway, Glenrothes, Fife
Scotland KY7 5PU
Telephone: (592) 753811
Fax: (44) 592 756443

FAR EASTERN HEADQUARTERS
Beckman Industrial Japan, Ltd.
Kakumaru Bldg.
1-10, Toyo 7-Chome
Koto-Ku, Tokyo, Japan
Telephone: Tokyo (03) 3615-1811
Fax: (03) 3647-2443