

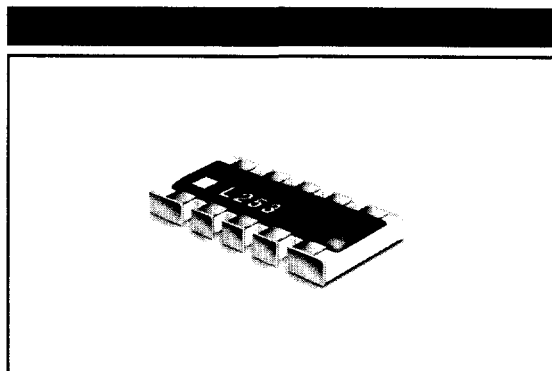
# MODEL BCN31

## R/2R Ladder Network

### 8 Bit, 2512 Size

### Thick Film

### Leadless Chip Packages



#### FEATURES

- 8 bit ladder network in a 10 terminal leadless chip package
- Convex termination with square edges and corners
- Topside marking for easy identification
- Solder plated termination with nickel barrier

#### BENEFITS

- Saves board space
- Reduces cost
- Single component reliability
- Leadless package offers improved performance

#### APPLICATIONS

- Termination network in analog to digital and digital to analog conversion circuits

#### ELECTRICAL

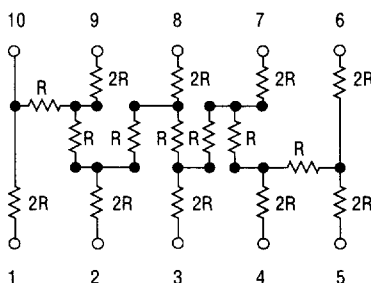
Standard Resistance Range, Ohms	1K to 100K
Standard Resistance Tolerance	±2%
Operating Temperature Range	-40°C to +125°C
Temperature Coefficient of Resistance	±100ppm/°C
Operating Voltage, Maximum	50Vdc or $\sqrt{pr}$
Insulation Resistance	100 Megohms
Power Rating, Watts at 70°C	25mW per Resistor / 400mW per Package
Ladder Network Accuracy	8 Bits: ±1/2LSB

Specifications subject to change without notice.

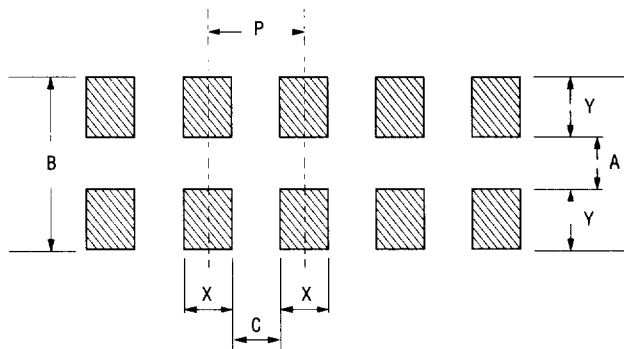
## ENVIRONMENTAL

Moisture Resistance	1,000 hours at +40°C, 95% R.H. (3.0% ΔR)
High Temperature Operation	1,000 hours at 70°C (3.0% ΔR)
Short Time Overload	2.5 x rated voltage, 5 seconds (2.0% ΔR)
Temperature Cycling	-55°C to +125°C, 5 cycles (1.0% ΔR)
Resistance to Solder Heat	260°C for 10 seconds (1.0% ΔR)
Load Life	1,000 hours at 70°C (3.0% ΔR)

## SCHEMATIC (Inch/mm)

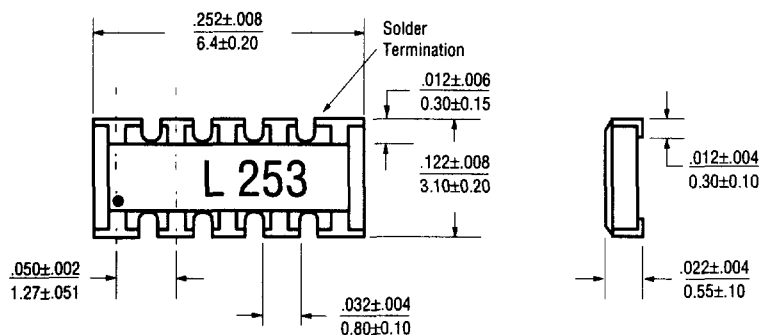


## SOLDER PAD LAYOUT (Inch/mm)



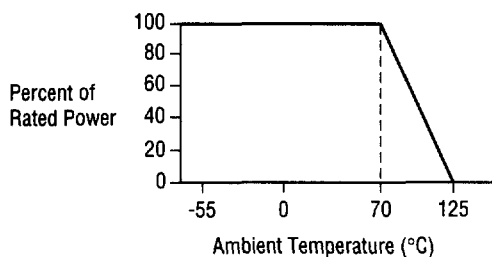
	Wave Solder Process					Re-Flow Solder Process				
P	A	B	C	X	Y	A	B	C	X	Y
.050 1.27	.084 2.10	.148 3.70	.014 0.35	.036 0.90	.032 0.80	.084 2.10	.148 3.70	.014 0.35	.036 0.90	.032 0.80

# **OUTLINE DIMENSIONS (Inch/mm)**



4

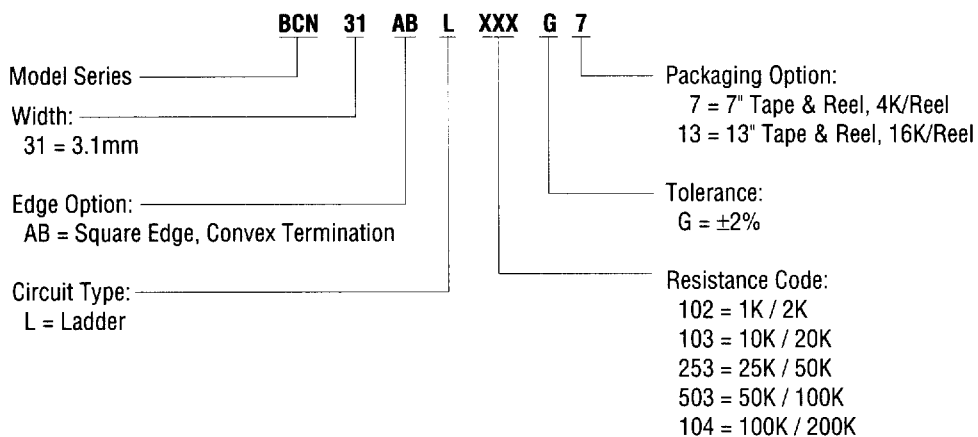
## **POWER DERATING CURVE**



## **STANDARD RESISTANCE VALUES, OHMS**

Value (R1/R2)	1K/2K	10K/20K	25K/50K	50K/100K	100K/200K
Code	102	103	253	503	104

## ORDERING INFORMATION



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