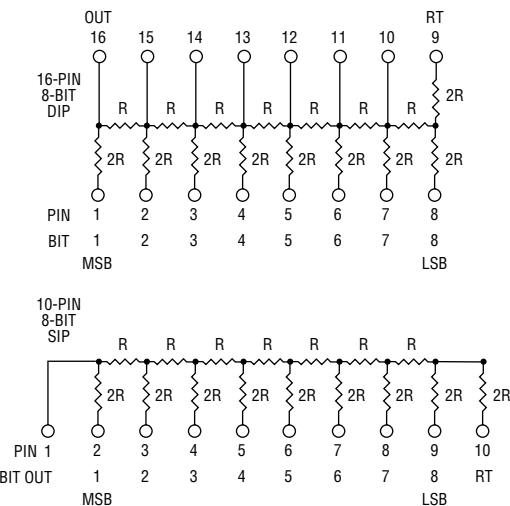


R/2R Ladder Networks

BOURNS®

R/2R Ladder Networks are available in both DIP and SIP (Molded or Conformal) configurations.



The R/2R Ladder Network is commonly used for Digital to Analog (D/A) conversions and Analog to Digital (A/D) conversion by successive approximations. The bits of the ladder are the points at which input signals are presented to the ladder and the output terminal (OUT) is the point at which the output is

taken from the R/2R ladder. This terminal (OUT) is commonly used to drive an operational amplifier. R_T (the terminating resistor) is always connected to ground.

Standard R/2R Ladder Networks have a resistance tolerance of $\pm 2.0\%$ ($\pm 1.0\%$ available on all but low profile SIPs).

Standard R/2R Ladder Networks

Availability is as follows:

DIP/SMD	SIP-CONFORMAL	SIP MOLDED
14 Pin - 7 Bit	6 Pin - 4 Bit	6 Pin - 4 Bit
16 Pin - 8 Bit	7 Pin - 5 Bit	8 Pin - 6 Bit
	8 Pin - 6 Bit	10 Pin - 8 Bit
	9 Pin - 7 Bit	
	10 Pin - 8 Bit	
	11 Pin - 9 Bit	
	12 Pin - 10 Bit	
	14 Pin - 12 Bit	

Resistor Power Ratings @ 70° C

Low Profile SIP & DIP	.125W
Medium Profile SIP	.170W
High Profile SIP	.200W

How To Order R/2R Ladder Networks

41 16 R - R2R - 503

Model
(41 = Molded DIP)
(43 = Molded SIP)
(44 = Wide Body SMD)
(46 = Conformal SIP)
(48 = SMD)

Number of Pins

Physical Configuration
(R = Low Profile - Molded)
(X = Low Profile - Conformal)
(M = Medium Profile)
(H = High Profile)
(P = Medium Body SOIC)

Resistance/Capacitance Code
(For value of R). 2R is double this value.
• First 2 digits are significant.
• Third digit represents the number of zeros to follow.

Electrical Configuration
• R2R = R/2R Ladder Network