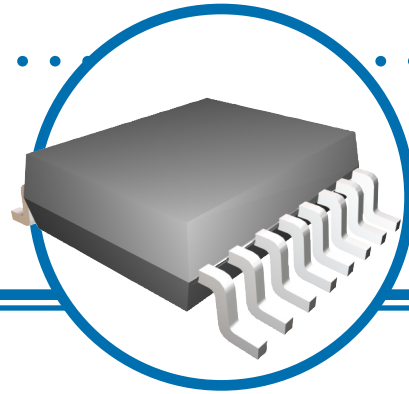


# R-2R Ladder Network



## R-2R Series

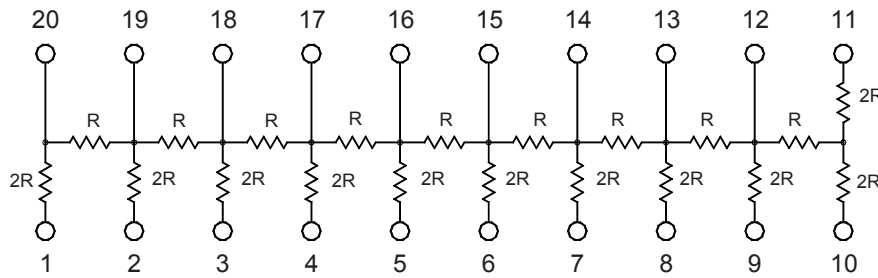
- $\pm 2\%$  Absolute tolerance
- Ladder accuracy  $\pm 1$  LSB
- 8 and 10 bit R-2R Schematic
- QSOP Package - Small Footprint
- Standard Sn/Pb and Pb-free terminations available



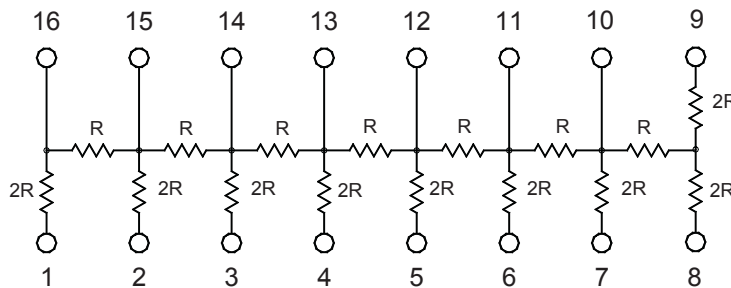
## Electrical Data

Resistance Value (ohms)	Absolute Tolerance (%)	Ratio Tolerance	Absolute TCR (ppm/ $^{\circ}$ C)	TCR Tracking (ppm/ $^{\circ}$ C)	Operating Temperature Range ( $^{\circ}$ C)
10K/20K and 25K/50K	$\pm 2\%$	$\pm 1$ LSB	$\pm 25, \pm 50, \pm 100$	$\pm 5$	-55 to +125

## Schematic Data



QS009 20-Pin, 10 bit, R-2R Schematic



QS014 16-Pin, 8 bit, R-2R Schematic

### General Note

IRC reserves the right to make changes in product specification without notice or liability. All information is subject to IRC's own data and is considered accurate at time of going to print.



# R-2R Ladder Network

## Physical Data

# OF PINS	DIMENSION "D"	ZD REF
16	0.193" ±0.004	0.009"
20	0.341" ±0.004	0.058"

Note: All dimensions exclude mold flash and end flash which shall not exceed 0.006" per side. Drawing proportions not to scale.

Note: Lead Coplanarity 0.004" Max.

## Ordering Data

Prefix ..... **GUS** - **QS009** - **01** - **1002** - **G**

**Model** .....  
 QS009 = 20-Pin, 10 bit, R-2R Ladder Network with Sn/Pb terminations  
 QS009LF = 20-Pin, 10 bit, R-2R Ladder Network with 100% matte tin, Pb-free terminations  
 QS014 = 16 Pin, 8 bit, R-2R Ladder Network with Sn/Pb terminations  
 QS014LF = 16-Pin, 8 bit, R-2R Ladder Network with 100% matte tin, Pb-free terminations

**Temperature Coefficient** .....  
 01 = ±100ppm/°C; 02 = ±50ppm/°C; 03 = ±25ppm/°C

**Absolute Tolerance** .....  
 G = ±2%

**Resistance** .....  
 1002 = 10KΩ/20KΩ  
 2502 = 25KΩ/50KΩ