

Thin Film Resistor Networks

Ultra Precision
Thin Film - Ceramic



Model	NQS	664/667/668	688	694/698/699
Number of Leads	16/20/24	8/14/16	16	8/16/14
Available Circuit Type	A, B	A, B	A, B	-3, -1
Dimensions, Inches				
Body Length, Maximum	0.196/0.344/0.344	0.196/0.344/0.393	0.413	0.375/0.760/0.760
Height Off Board, Maximum	0.068	0.068	0.104	0.2
Body Style/Width	(QSOP) 0.157	(SOICN) 0.157	(SOICW) 0.300	(PDIP) 0.300
Resistance				
Range, Ohms	10 to 140K	10 to 275K	10 to 275K	10 to 275K
Tolerance (%)	±0.1	±0.1	±0.1	±0.1
Temp. Coefficient, ppm/°C	±25	±25	±25	±25
Temp. Coefficient Tracking, ppm/°C	±5	±5	±5	±5
Power Rating, Watts at 70°C				
Per Resistor	0.1	0.1	0.1	0.1
Per Package	NQS16 = 0.8 NQS20/24 = 1.0	664 = 0.4 667/668 = 0.8	1	694 = 0.4 698/699 = 0.6
Packaging Options				
Tubes	NQS20/24 = 56 NQS16 = 100	664 = 100 667/668 = 50	50	694 = 50 698/699 = 25
Tape & Reel: 7"	1000	664 = 1000 667/668 = 500	500	
Tape & Reel: 13"	2500	2500	1500	
Vial				

Ordering Information

NQS	694/698/699	SQS/SSN/SSW/SPD/SS1
<p>Model Series: NQS 24 A 1001 B P LF 7</p> <p>Number of leads: 16 = 16 leads, 20 = 20 leads, 24 = 24 leads</p> <p>Circuit Type: A = Isolated, B = Bussed</p> <p>Resistance Code</p> <p>Tape & Reel Options: 7 = 7" Reel Dia, 13 = 13" Reel Dia</p> <p>LF for RoHS</p> <p>TCR Code: P = ±50ppm/°C, Q = ±25ppm/°C, (No code is ±100ppm/°C)</p> <p>Accuracy: Resistance Tol / Ratio, B = ±0.1% / ±0.1%, D = ±0.5% / ±0.1%, F = ±1.0% / ±0.5%</p>	<p>Model Series: 69 4-3-R10K B LF</p> <p>Number of leads: 4 = 8 leads, 8 = 16 leads, 9 = 14 leads</p> <p>LF for RoHS</p> <p>Accuracy Code</p> <p>Resistance Value Consult Factory</p> <p>Circuit Type: 1 = Bussed, 3 = Isolated</p>	<p>Model Series: S QS 16 A 1000 F S LF 13</p> <p>Package Type: CS = QSOP, SN = SOIC (Narrow Body), SW = SOIC (Wide Body), PD = P-DIP, S1 = SOT-23, S2 = SOT-143</p> <p>Number of Pins: 3, 4, 8, 14, 16, 20 and 24</p> <p>Circuit Type: A = Isolated, B = Bussed, D = Dual Termination, D1 = Differential Termination, G = GTL Termination, N = HTSL Termination, L = R / 2R Ladder, N = NTL Termination, V = V.35 Termination, VD = Voltage Divider</p> <p>TCR Code: L = ±200ppm/°C, S = ±100ppm/°C, P = ±50ppm/°C, Q = ±25ppm/°C</p> <p>Absolute / Ratio Tolerance Code: B = ±0.1% / ±0.1%, D = ±0.5% / ±0.1%, F = ±1.0% / ±0.5%, G = ±2.0% / (N/A), J = ±5.0% / (N/A)</p> <p>Resistance Code</p>
<p>664/667/668/688</p> <p>Model Series: 66 4 A 1001 A LF 7</p> <p>Number of leads: 4 = 8 leads, 7 = 14 leads, B = 16 leads</p> <p>Circuit Type: A = Isolated, B = Bussed, J = Dual Terminator</p> <p>Tape & Reel Options: 7 = 7" Reel Dia, 13 = 13" Reel Dia</p> <p>LF for RoHS</p> <p>Accuracy (Absolute / Ratio): A = ±0.1% / ±0.05%, B = ±0.1% / ±0.1%, D = ±0.5% / ±0.1%, F = ±1.0% / ±0.5%</p> <p>Resistance Code</p>		

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

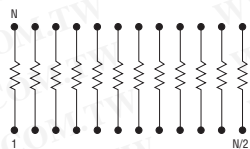


Precision Thin Film - Silicon

SQS	SSN	SSW	SPD	SS1
16,20,24	8,14,16	16,18,20	8,14,16	3
A, B, D, D1, G, H, L, N, V	A, B, D, D1, L, N, V	A, B, D, D1, L, V	A, B, L	VD
0.196/0.344/0.344	0.196/0.344/0.393	0.406/0.459/0.506	0.375/0.760/0.760	0.119
0.068	0.068	0.104	0.2	0.044
(QSOP) 0.157	(SOICN) 0.157	(SOICW) 0.300	(PDIP) 0.300	(SOT23) 0.096
10 to 250k	10 to 250k	10 to 250k	10 to 250k	1k to 50k
±0.1	±0.1	±0.1	±0.1	±0.1
±25	±25	±25	±25	±25
±5	±5	±5	±5	±5
0.1	0.1	0.1	0.1	0.1
SQS16 = 0.8 SQS20/24 = 1.0	SSN8 = 0.4 SSN14/16 = 0.8	1.0	SPD8 = 0.4 SPD14/16 = 0.6	0.2
SQS16 = 100 SQS20/SQS24 = 50	SSN8 = 100 SSN14/SSN16 = 50	50	SPD8 = 50 SPD14/SPD16 = 25	
1000	SSN8 = 1000 SSN14/16 = 500	500		
2500	2500	1500		
				500

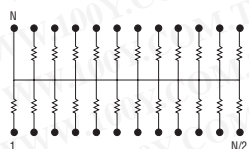
Schematics

Isolated Resistors



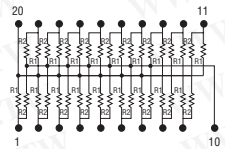
Resistance Code: First 3 digits are significant. Fourth digit denotes number of trailing zeros.

Bussed Resistors



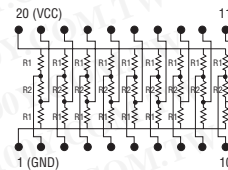
Resistance Code: First 3 digits are significant. Fourth digit denotes number of trailing zeros.

Dual Terminator/SCSI



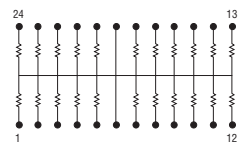
Resistance Code (R1/R2w):
01 = 220/330

Differential Ended SCSI Termination



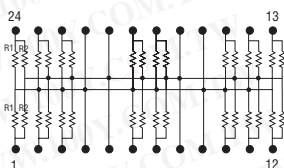
Resistance Code (R1/R2/R1w): 01 = 330/150/330

GTL Termination



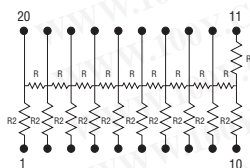
Resistance Code: First 3 digits are significant. Fourth digit denotes number of trailing zeros.

HSTL Termination



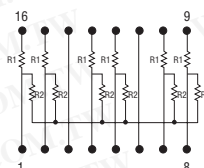
Resistance Code (R1/R2w):
01 = 94/94, 02 = 100/100, 03 = 112/112,
04 = 136/136

R/2R Ladder



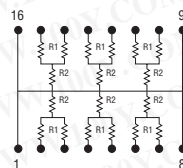
Resistance Codes w: 01 = 25k/50k,
02 = 10k/20k, 03 = 50k/100k

NTL Termination



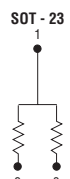
Resistance Codes (R1/R2w):
01 = 22/90

V.35 Termination



Resistance Codes
(R1/R2w): 01 = 50/125

Voltage Divider



Consult Factory for resistance codes.