

90° HYBRIDS

WIDEBAND SURFACE-MOUNT (8 Pin-Relay Header)



FREQUENCY RANGE (MHz)	INSERTION LOSS (dB) TYP/MAX	AMPLITUDE UNBALANCE (dB) TYP/MAX	PHASE UNBALANCE (Degrees) TYP/MAX	ISOLATION (dB) TYP/MIN	VSWR TYP	PACKAGE	MODEL
3-32	1.0/1.5	0.9/1.2	2.0/3.0	25/20	1.3:1	102S	DQS-3-32
5-50	1.0/1.5	0.9/1.2	2.0/3.0	25/20	1.3:1	102S	DQS-5-50
10-50	0.8/1.0	0.5/0.9	1.5/3.0	30/20	1.3:1	102S	DQS-10-50
10-100	1.0/1.5	0.9/1.2	2.0/3.0	25/20	1.3:1	102S	DQS-10-100
15-150	1.2/1.7	0.9/1.2	2.5/4.0	25/17	1.3:1	102S	DQS-15-150
20-100	0.8/1.0	0.5/0.8	1.5/3.0	30/20	1.3:1	102S	DQS-20-100
20-200	1.3/1.8	0.9/1.2	2.5/4.0	25/17	1.3:1	102S	DQS-20-200
25-250	1.5/2.0	0.9/1.2	2.5/4.0	25/17	1.3:1	102S	DQS-25-250
30-150	0.8/1.0	0.5/0.9	1.5/3.0	30/20	1.3:1	102S	DQS-30-150
30-300	1.5/2.0	1.0/1.4	3.0/5.0	25/16	1.3:1	102S	DQS-30-300
40-200	0.9/1.0	0.5/1.0	2.0/4.0	30/18	1.3:1	102S	DQS-40-200
40-400	1.7/2.2	1.0/1.5	3.0/5.0	25/16	1.3:1	102S	DQS-40-400
45-450	0.9/1.0	0.5/1.0	2.0/4.0	30/18	1.3:1	102S	DQS-45-450
50-250	0.9/1.0	0.5/1.0	2.0/4.0	30/18	1.3:1	102S	DQS-50-250
50-500	1.7/2.2	1.0/1.5	3.0/5.0	23/13	1.3:1	102S	DQS-50-500
60-300	0.9/1.0	0.6/1.0	2.0/4.0	30/18	1.3:1	102S	DQS-60-300
70-350	1.1/1.5	0.6/1.2	2.5/5.0	28/16	1.4:1	102S	DQS-70-350
80-400	1.2/1.5	0.6/1.25	3.0/5.0	25/16	1.4:1	102S	DQS-80-400
90-450	1.2/1.5	0.7/1.25	3.0/5.0	23/16	1.4:1	102S	DQS-90-450
100-500	1.2/1.5	0.8/1.25	3.0/5.0	25/16	1.4:1	102S	DQS-100-500

WIDEBAND LEADED SURFACE MOUNT (8 Pin-Relay Header)



FREQUENCY RANGE (MHz)	INSERTION LOSS (dB) TYP/MAX	AMPLITUDE UNBALANCE (dB) TYP/MAX	PHASE UNBALANCE (Degrees) TYP/MAX	ISOLATION (dB) TYP/MIN	VSWR TYP	PACKAGE	MODEL
3-32	1.0/1.5	0.9/1.2	2.0/3.0	25/20	1.3:1	102L	DQL-3-32
5-50	1.0/1.5	0.9/1.2	2.0/3.0	25/20	1.3:1	102L	DQL-5-50
10-50	0.8/1.0	0.5/0.9	1.5/3.0	30/20	1.3:1	102L	DQL-10-50
10-100	1.0/1.5	0.9/1.2	2.0/3.0	25/20	1.3:1	102L	DQL-10-100
15-150	1.2/1.7	0.9/1.2	2.5/4.0	25/17	1.3:1	102L	DQL-15-150
20-100	0.8/1.0	0.5/0.8	1.5/3.0	30/20	1.3:1	102L	DQL-20-100
20-200	1.3/1.8	0.9/1.2	2.5/4.0	25/17	1.3:1	102L	DQL-20-200
25-250	1.5/2.0	0.9/1.2	2.5/4.0	25/17	1.3:1	102L	DQL-25-250
30-150	0.8/1.0	0.5/0.9	1.5/3.0	30/20	1.3:1	102L	DQL-30-150
30-300	1.5/2.0	1.0/1.4	3.0/5.0	25/16	1.3:1	102L	DQL-30-300
40-200	0.9/1.0	0.5/1.0	2.0/4.0	30/18	1.3:1	102L	DQL-40-200
40-400	1.7/2.2	1.0/1.5	3.0/5.0	25/16	1.3:1	102L	DQL-40-400
45-450	1.7/2.2	1.0/1.5	3.0/5.0	25/16	1.3:1	102L	DQL-45-450
50-250	0.9/1.0	0.5/1.0	2.0/4.0	30/18	1.3:1	102L	DQL-50-250
50-500	1.7/2.2	1.0/1.5	3.0/5.0	23/13	1.3:1	102L	DQL-50-500
60-300	0.9/1.0	0.6/1.0	2.0/4.0	30/18	1.3:1	102L	DQL-60-300
70-350	1.1/1.5	0.6/1.2	2.5/5.0	28/16	1.4:1	102L	DQL-70-350
80-400	1.2/1.5	0.6/1.25	3.0/5.0	25/16	1.4:1	102L	DQL-80-400
90-450	1.2/1.5	0.7/1.25	3.0/5.0	23/16	1.4:1	102L	DQL-90-450
100-500	1.2/1.5	0.8/1.25	3.0/5.0	25/16	1.4:1	102L	DQL-100-500

Power Rating: 1 Watt, max.

All specifications assume 50 ohms impedance of all ports

*Terminate isolated port with 50 ohms externally

**GROUND = Ground externally

For pin location and package outline drawings, see back pages.

PIN-OUT TABLE

INPUT	+90° OUTPUT	0° OUTPUT	ISOLATED*	GROUND**
1	8	7	2	3,4,5,6

