

## CIRCULATORS AND ISOLATORS

Model Number	Frequency (GHz)	Insertion Loss Max (dB)	Isolation, Min (dB)	VSWR Max	Power Max (Watts)	Package
<b>POPULAR BAND COAXIAL ISOLATORS</b>						
20A0001	0.42-.450	0.4	20	1.25	1	304
20B0091	0.49-0.53	0.5	20	1.25	1	304
20B1401	1.00-1.10	0.5	20	1.25	1	303
20B1403	1.20-1.40	0.5	20	1.25	1	303
20B1611	1.60-1.80	0.5	20	1.25	1	302
20B1601	1.80-2.10	0.5	17	1.35	1	302
20AV3401	2.20-2.30	0.5	20	1.25	1	302
20B3501	2.70-3.10	0.5	20	1.25	1	302
20B3551	3.00-3.50	0.5	20	1.25	1	302
20B3602	3.70-4.20	0.5	20	1.25	1	301
20B6401	4.20-4.40	0.5	20	1.25	1	301
20B6501	5.40-5.90	0.5	20	1.25	1	301
20C6501	5.90-6.50	0.5	20	1.25	1	301
20N6501	6.50-7.20	0.5	20	1.20	1	301
60D2001	10.00-12.00	0.5	20	1.25	3	301
20B0151	.85-.95	0.5	20	1.25	1	303
20C1361	.950-1.22	0.5	18	1.30	1	304
20B1551	1.435-1.53	0.5	20	1.25	1	302
<b>BROADBAND COAXIAL ISOLATORS</b>						
60A1101	1.00-2.00	0.6	15	1.40	1	305
60A3001	2.00-4.00	0.5	18	1.30	1	303
60A3401	2.00-6.00	1.0	12	1.65	1	303
60A3011	2.60-5.20	0.5	18	1.30	1	303
60A6301	3.00-6.00	0.5	18	1.40	1	302
60A6001	4.00-8.00	0.5	18	1.30	3	302
60A6071	5.00-10.00	0.5	18	1.30	2	302
60A9201	6.00-12.00	0.7	16	1.35	1	302
60A2701	6.50-18.00	1.0	14	1.50	1	301
60A2171	7.00-18.00	0.75	13	1.58	1	301
60A2301	7.50-18.00	0.9	14	1.50	1	301
60B2001	8.00-10.00	0.5	20	1.25	3	301
20B9201	8.00-12.40	0.5	20	1.30	1	301
60A2001	8.00-16.00	0.5	17	1.35	1	301
60A2501	8.00-16.00	0.5	17	1.35	1	301
60A2051	8.00-18.00	0.6	14	1.50	1	301
60A2401	8.00-20.00	1.0	12	1.67	1	301
20A2441	12.00-15.00	0.5	20	1.25	3	301
20B2201	12.00-18.00	0.5	18	1.30	3	301
20B2441	15.00-18.00	0.5	20	1.25	3	301
20A8021	18.00-22.00	0.7	18	1.30	1	301
60A8101	18.00-26.50	1.0	14	1.50	1	301
<b>POPULAR BAND DROP-IN ISOLATORS</b>						
29B0811	0.92-0.96	0.3	23	1.17	140	323
29A3301	1.20-1.40	0.6	17	1.35	1	313
29A1A02	1.93-1.99	0.3	20	1.17	140	322
29T3401	2.20-2.30	0.5	20	1.25	1	311
29BM3501	2.70-2.90	0.6	20	1.25	1	311
29A31291	3.00-3.60	0.5	18	1.40	1	310

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<b>POPULAR BAND DROP-IN ISOLATORS, Cont.</b>						
29A3801	3.70-4.20	0.4	20	1.25	1	311
29U6401	4.20-4.40	0.4	20	1.25	1	310
29AG6501	5.40-5.90	0.5	20	1.25	1	310
29G6601	5.90-6.40	0.5	20	1.25	1	310
<b>BROADBAND DROP-IN ISOLATORS</b>						
69A3101	2.00-4.00	0.6	16	1.40	1	312
69A6201	3.00-6.00	0.6	16	1.40	1	312
69A6001	4.00-6.00	0.6	16	1.40	1	311
69A6101	5.00-10.00	0.6	16	1.40	1	311
69A9201	8.00-12.00	0.6	17	1.40	1	310
69A9301	8.00-16.00	0.8	14	1.50	1	310
69A2031	8.00-18.00	1.0	13	1.60	1	310
69A2201	12.00-18.00	0.7	17	1.50	1	310
<b>POPULAR BAND COAXIAL CIRCULATORS</b>						
10B0051	0.42-0.45	0.4	20	1.25	200	304
10B0151	0.85-.950	0.5	20	1.25	200	303
10B1031	0.95-1.225	0.5	18	1.30	300	304
10B1401	1.00-1.10	0.5	20	1.25	200	303
10B1402	1.20-1.40	0.5	20	1.25	200	303
10B1551	1.44-1.54	0.5	20	1.25	110	302
10B1601	1.60-1.80	0.5	20	1.25	110	302
10B1631	1.80-2.10	0.5	17	1.35	50	302
10B3401	2.20-2.30	0.4	20	1.25	50	302
10B3501	2.50-2.70	0.5	20	1.25	50	302
10C3501	2.70-3.10	0.5	20	1.25	50	302
10B3551	3.00-3.50	0.5	20	1.25	50	302
10B6401	4.20-4.40	0.5	20	1.25	50	301
10B6501	5.40-5.90	0.5	20	1.25	50	301
10C6501	5.90-6.50	0.5	20	1.25	50	301
10H6501	6.50-7.20	0.5	20	1.25	50	301
<b>BROADBAND COAXIAL CIRCULATORS</b>						
50A1101	1.00-2.00	0.6	15	1.40	100	305
50A3001	2.00-4.00	0.5	18	1.30	125	303
50A3401	2.00-6.00	1.0	12	1.65	75	303
50A3011	2.60-5.20	0.5	18	1.30	125	303
10B3602	3.70-4.20	0.5	20	1.25	50	301
50A6001	4.00-8.00	0.5	18	1.30	125	302
50A6071	5.00-10.00	0.5	18	1.30	125	302
50A9201	6.00-12.00	0.7	16	1.35	75	302
50A2701	6.50-18.00	1.0	14	1.50	50	301
50A2171	7.00-18.00	0.9	12	1.65	65	301
50A2301	7.50-18.00	0.9	13	1.58	65	301
50E2001	8.00-10.00	0.5	20	1.25	65	301
59A9201	8.00-12.00	0.6	16	1.40	65	310
10B9201	8.00-12.40	0.5	20	1.30	65	301
50A2001	8.00-16.00	0.5	17	1.35	65	301
50A2501	8.00-16.00	0.5	17	1.35	65	301
50A2051	8.00-18.00	0.6	14	1.50	65	301
50A2401	8.00-20.00	1.0	11	1.78	50	301
50C2001	10.00-12.00	0.5	20	1.25	65	301

**CIRCULATORS AND ISOLATORS**

Model Number	Frequency (GHz)	Insertion Loss Max (dB)	Isolation, Min (dB)	VSWR Max	Power Max (Watts)	Package
<b>BROADBAND COAXIAL CIRCULATORS, Cont.</b>						
10B2441	15.00-18.00	0.5	20	1.25	65	301
10A8021	18.00-22.00	0.7	18	1.30	65	301
10A8021	18.00-22.00	0.7	18	1.30	65	301
50A8101	18.00-26.5	1.0	13	1.58	50	301
<b>POPULAR BAND DROP-IN CIRCULATORS</b>						
19A3301	1.20-1.40	0.6	17	1.35	300	313
19D3401	2.20-2.30	0.5	20	1.25	100	311
19K3501	2.70-2.90	0.6	20	1.25	50	311
19A31281	3.00-3.60	0.6	18	1.30	50	310
50A6301	3.00-6.00	0.5	18	1.40	125	302
19D6401	4.20-4.40	0.4	18	1.30	50	310
19A6501	5.40-5.90	0.5	18	1.30	50	310
19A6801	5.90-6.40	0.5	18	1.30	50	310
<b>BROADBAND DROP-IN CIRCULATORS</b>						
59A3101	2.00-4.00	0.6	16	1.40	100	312
59A6201	3.00-6.00	0.6	16	1.40	75	312
19A3801	3.70-4.20	0.4	20	1.25	50	311
59A6001	4.00-8.00	0.6	16	1.40	75	311
59A6101	5.00-10.00	0.6	15	1.45	75	311
59A9301	8.00-16.00	0.8	14	1.50	65	310
59A2201	12.00-18.00	0.7	15	1.50	50	310
<b>MICROSTRIP MODELS</b>						
Model Number	Frequency (GHz)	Insertion Loss Max (dB)	Isolation, Min (dB)	VSWR Max	Power Max (Watts)	Size (inches)
<b>ISOLATORS</b>						
D9A6A03	5.15-5.35	0.4	20	1.20:1	10	.470X.420X.09
D9A6A05	5.20-5.90	0.4	19	1.22:1	10	.470X.420X.09
D9A6A04	5.73-5.83	0.3	20	1.20:1	10	.470X.420X.09
D9B6011	5.90-7.10	0.4	18	1.22:1	10	.470X.420X.09
D9A6011	5.90-7.10	0.6	16	1.40:1	10	.420X.470X.110
D9A6A01	7.10-8.50	0.6	16	1.40:1	10	.420X.470X.110
D9B6A01	7.10-8.80	0.4	18	1.22:1	10	.470X.420X.09
C9B9041	8.00-11.00	0.5	16	1.50:1	20	.330X.330X.120
D9A9A03	9.00-12.00	0.6	16	1.30:1	10	.470X.420X.10
D9A9A02	10.95-12.95	0.45	18	1.22:1	5	.330X.330X.12
D9A2A04	12.95-14.50	0.45	20	1.22:1	5	.330X.330X.12
D9A2001	14.20-15.40	0.5	18	1.30:1	0.25	.275X.63X.216
D9A8A02	18.00-19.70	0.7	16	1.30:1	1	.238X.280X.130
D9A8A03	18.80-19.30	0.7	16	1.30:1	1	.238X.280X.130
D9A8A04	21.00-23.50	0.8	16	1.30:1	1	.238X.280X.130
D9A8A01	28.60-29.10	1.0	16	1.35:1	1	.165X.225X.125
<b>CIRCULATORS</b>						
D9A6A02*	5.20-5.90	0.4/0.7	20/40	1.22:1	10	.744X.925X.16
C9A6A02	7.10-8.50	0.4	20	1.22:1	10	.300X.300X.11
C9A9A01	8.00-11.00	0.5	17	1.32:1	1	.240X.300X.090
C9A9031*	8.50-11.50	0.5/0.7	15/30	1.4:1	20	.556X.351X.07
C9A9071	9.00-9.20	0.5	17	1.30:1	6	.330X.330X.120
C9A9A05	9.00-11.00	0.4	20	1.20:1	10	.300X.300X.09
C9A2021	15.00-18.00	0.45	17	1.25:1	4	.212X.238X.13
C9A8A01	18.80-19.30	0.5	18	1.22:1	10	.212X.238X.13

**Notes for Circulators and Isolators**

For additional specifications and details of each model please consult factory.

\* denotes Dual Junction Circulator

Many other frequencies, packages, power levels, and bandwidth choices are available. Please consult factory for details.

All models are available as space qualified units.

Most models are available as dual junction units.

Most models are available with CW or CCW circulation.

Waveguide products are available. Please consult factory for details.

Standard Operating Temperature = -30 to +70 C, Storage Temperature : -40 to +85 C