

IN-PHASE 2-WAY SMA, N, TNC DIVIDERS, POWER

0.5-18 GHz

SERIES YL D300

GENERAL INFORMATION:

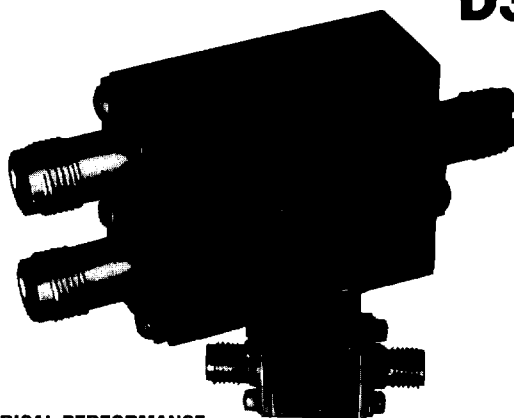
KDI/Triangle's Two-way Stripline in phase power dividers, Series YL, and D300 have excellent phase and amplitude balance. The internal resistive element is a ceramic pad and can, therefore, handle relatively high values of CW and peak power. Series YL is of Stripline construction, thereby ensuring excellent electrical and environmental performance.

GENERAL SPECIFICATIONS:

Frequency Range: 0.5-18.0 GHz
RF Impedance: 50 OHMS
RF Power: The power handling capability for load VSWR's less than 1.50 is 1 watt CW and 1 kW peak for frequencies up to 2.0 GHz, and 400 mW CW and 0.4 kW peak for frequencies from 2.0 GHz to 18.0 GHz.
Temp. Information: Operating temperature from -55°C to +85°C
Environment: MIL-E-5400, MIL-STD-202, MIL-E-16400 MIL-STD-883 (Special request only).
Connectors: SMA or N standard, others on request. TNC for D314T, D318T only

Notes:

1. If the frequency band of interest is narrower than that listed, it should be indicated when ordering. Performance will be optimized over the band of interest and improved delivery may be provided. A special part number may be assigned.
2. Output connectors are normally provided in line with input (Figures 1 & 3) unless specified at time of order (Figure 2). Add "S" to part number (i.e. YLS).



ELECTRICAL PERFORMANCE

OCTAVE BANDS									
Model No.	Frequency Range GHz	Max.* In/Out VSWR	Max. Insertion Loss dB	Min.* Isolation dB	Phase Balance Degrees	Amplitude Balance dB	Out-line SMA	Out-line N*	
YL-18	0.5-1.0	1.20/1.15	0.2	22	2	0.15	7	3	
YL-19	0.75-1.50	1.20/1.15	0.2	21	2	0.15	10	5	
YL-23	1.0-2.0	1.20/1.15	0.2	21	2	0.2	6	2	
YL-25	1.5-3.0	1.25/1.20	0.3	21	3	0.2	8	1	
YL-33	2.0-4.0	1.25/1.20	0.3	21	3	0.2	3	1	
YL-48	4.0-8.0	1.30/1.25	0.4	20	4	0.3	2	1	
YL-56	7.0-14.0	1.40/1.35	0.5	19	6	0.4	1	6	
YL-58	9.0-18.0	1.45/1.40	0.7	19	8	0.4	1	N/A	
MULTI-OCTAVE BANDS									
YL-70	0.5-2.0	1.25/1.15	0.4	22	2	0.2	10	5	
YL-71	1.0-4.0	1.30/1.20	0.4	21	2	0.2	6	2	
YL-72	2.0-8.0	1.30/1.25	0.5	20	3	0.2	4	2	
YL-74	6.0-18.0	1.50/1.40	0.8	16	6	0.4	1	N/A	
YL-76	1.0-12.4	1.50/1.40	1.0	16	6	0.4	9	4	
YL-78	2.0-18.0	1.50/1.40	1.4	16	8	0.4	5	N/A	
	1.0-1.5	1.70/1.30	0.5	12	1	0.2			
	1.5-2.0	1.60/1.30	0.5	15	1	0.2			
	2.0-4.0	1.50/1.30	0.4	20	1	0.2			
D301M	4.0-8.0	1.50/1.40	0.5	18	2	0.2			(see DWG)
	8.0-12.0	1.50/1.40	0.8	16	3	0.3			
	12.0-16.0	1.60/1.50	0.9	15	4	0.3			
	16.0-18.5	1.70/1.60	1.2	12	7	0.4			

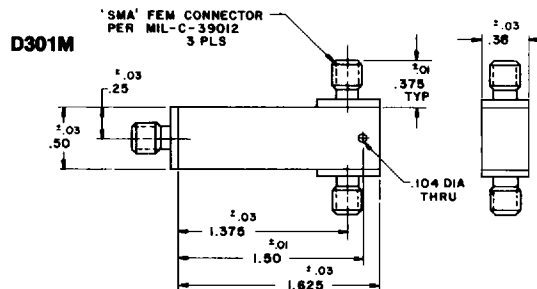
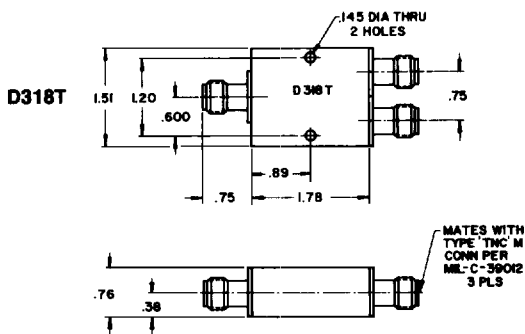
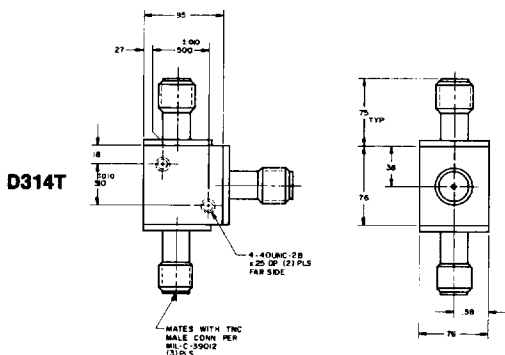
POPULAR & COMMUNICATION BANDS

YL-80	0.95-1.3	1.20/1.15	0.2	23	2	0.1	11	1	
YL-82	1.7-2.4	1.25/1.20	0.2	23	2	0.1	8	1	
YL-84	3.6-4.3	1.25/1.20	0.3	23	2	0.15	3	1	
YL-86	5.7-6.5	1.25/1.20	0.3	22	2	0.15	2	1	
YL-88	7.1-7.7	1.30/1.25	0.4	22	3	0.15	2	7	
YL-90	8.0-12.4	1.35/1.30	0.5	20	3	0.2	1	6	
YL-92	12.0-18.0	1.50/1.40	0.7	18	6	0.3	1	N/A	
YL-94	14.0-16.0	1.40/1.35	0.5	20	5	0.2	1	6	

TYPE TNC CONNECTORS

D314T	6-16.5	1.50/1.40	1.0	15	10	0.5			(see DWG)
D318T	2-10	1.8	0.8	13	6	0.4			(see DWG)
	10-18	2.2	1.6	13	10	0.5			(see DWG)

* UNITS WITH TYPE N CONNECTORS: Up to 4.0 GHz multiply VSWR's by 1.05 and subtract 2.0dB from isolation. Above 4.0 GHz multiply VSWR's by 1.10, and subtract 3.0dB from isolation. Add suffix "N" to model no.



**KDI/triangle
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IN-PHASE 2-WAY

POWER DIVIDERS/COMBINERS

With SMA or N Connectors 0.5-18 GHz

SERIES YL D300

MECHANICAL OUTLINES—FIGURE 1, 2 SMA CONNECTOR SERIES YL, YLS

Outline	A Inches cm.	B Inches cm.	C Inches cm.	D Inches cm.	E Inches cm.
1	0.85 2.16	0.82 2.08	0.650 1.651	0.38 0.96	0.20 0.51
2	0.85 2.16	0.75 1.91	0.650 1.651	0.30 0.76	0.20 0.51
3	0.85 2.16	1.00 2.54	0.650 1.651	0.50 1.23	0.20 0.51
4	0.80 2.03	1.40 3.56	0.600 1.524	0.70 1.78	0.20 0.51
5	0.85 2.16	1.50 3.81	0.650 1.651	0.75 1.91	0.20 0.51
6	1.00 2.54	1.75 4.45	0.800 2.032	0.88 2.23	0.20 0.51
7	1.50 3.81	1.75 4.45	1.300 3.302	0.88 2.23	0.20 0.51
8	0.80 2.03	1.25 3.18	0.600 1.524	0.63 1.59	0.20 0.51
9	0.85 2.16	2.75 6.99	0.650 1.651	1.38 3.49	0.20 0.51
10	1.30 3.30	1.75 4.45	1.100 2.794	0.88 2.23	0.20 0.51
11	1.15 2.92	1.25 3.18	0.950 2.413	0.63 1.59	0.20 0.51

Inches/Centimeters ±.03 x ±.010/ ±.08 x ±.025

MECHANICAL OUTLINES—FIGURE 2, 3 N CONNECTOR SERIES YL-N, YLS-N

Outline	A Inches cm.	B Inches cm.	C Inches cm.	D Inches cm.	E Inches cm.
1	2.00 5.08	1.53 3.87	1.750 4.450	0.50 1.23	0.50 1.27
2	2.00 5.08	1.73 4.38	1.750 4.450	0.70 1.78	0.50 1.27
3	2.00 5.08	1.90 4.83	1.750 4.450	0.88 2.22	0.50 1.27
4	2.00 5.08	2.75 6.99	1.750 4.450	1.00 2.54	0.50 1.27
5	2.00 5.08	1.45 3.68	1.750 4.450	0.88 2.22	0.50 1.27
6	2.00 5.08	1.15 2.92	1.750 4.450	0.50 1.27	0.50 1.27

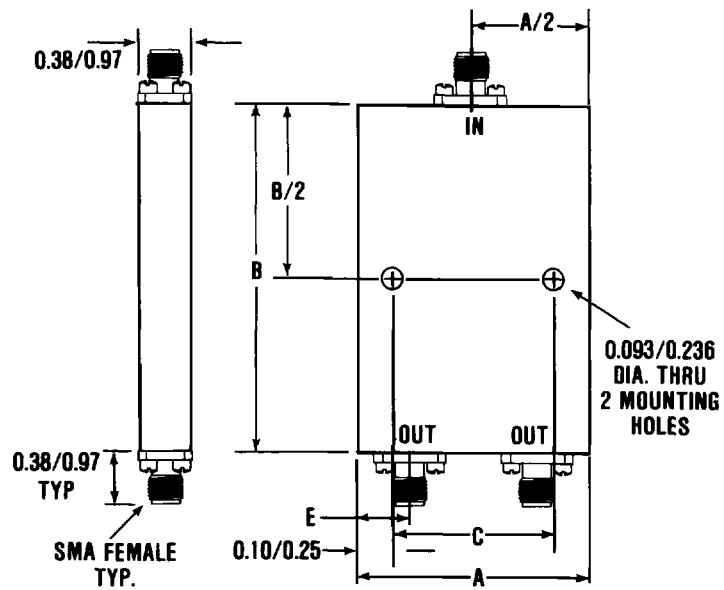


FIGURE 1
SERIES YL

TYPICAL MODEL NO.
YL (S) — 25 N
Basic Fig. 2 Freq. Type N
Series Option Option

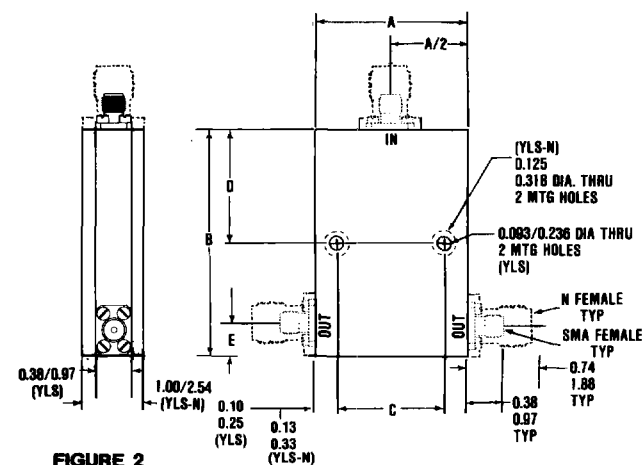


FIGURE 2
SERIES YLS, YLS-N

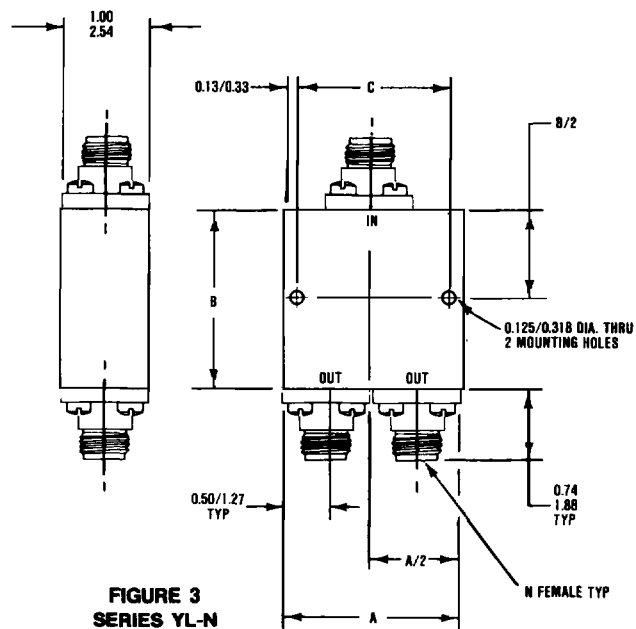


FIGURE 3
SERIES YL-N

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