

IN-PHASE 3-WAY

DIVIDERS/COMBINERS, POWER

With SMA or N Connectors 0.950-18 GHz

SERIES YT

GENERAL INFORMATION:

KDI/Triangle's Three-way Stripline in-phase power dividers, Series YT, 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 YT is of Stripline construction, thereby ensuring excellent electrical and environmental performance.

GENERAL SPECIFICATIONS:

Frequency Range: 0.95-18.0 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).

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. If type N connectors are required add N to the model number. i.e.; YT-18, with type N connectors, is ordered as YT-18N.
3. Certain models are not available with type N connectors.
4. All 3 way power dividers can be reduced in size if required.

ELECTRICAL PERFORMANCE

Model No.	Frequency Range GHz	Max.* In/Out VSWR	Max. Insertion Loss dB	Min.* Isolation dB	Phase Balance ± DEG.	Amplitude Balance ± dB	Out-line SMA	Out-line N
YT-18	0.95-1.25	1.25/1.20	0.50	20	2	0.20	1	1
D3006M	1-2	1.25	0.55	21	3	0.15	5	NOTE 3
YT-22	1.20-1.40	1.20/1.15	0.50	22	2	0.20	1	1
YT-23	1.70-2.40	1.30/1.25	0.50	20	2	0.20	2	2
D3007M	2-4.2	1.30/1.25	0.65	21	4	0.20	6	NOTE 3
YT-41	3.70-4.20	1.30/1.25	0.50	20	2	0.20	2	2
YT-45	4.40-5.00	1.35/1.30	0.60	20	3	0.25	3	3
YT-55	5.40-5.90	1.35/1.30	0.60	20	3	0.25	3	3
YT-56	5.20-6.00	1.35/1.30	0.60	18	3	0.25	3	3
YT-61	6.70-7.40	1.35/1.30	0.60	18	3	0.25	3	3
YT-68	6.80-8.50	1.40/1.35	0.80	18	4	0.25	3	3
YT-69	7.10-7.70	1.35/1.30	0.60	20	3	0.25	3	3
YT-71	7.50-8.50	1.35/1.30	0.60	20	3	0.25	3	3
YT-89	8.40-9.70	1.40/1.35	0.50	17	4	0.30	4	4
YT-91	9.30-9.70	1.35/1.30	0.50	18	3	0.30	4	4
YT-92	9.50-11.00	1.45/1.40	0.50	17	4	0.30	4	4
YT-94	13.10-13.50	1.35/1.30	0.65	20	3	0.25	4	4
YT-95	11.00-14.00	1.50/1.45	0.75	16	5	0.30	4	4
YT-98	15.00-18.00	1.50/1.45	1.10	16	5	0.45	4	NOTE 3

*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.

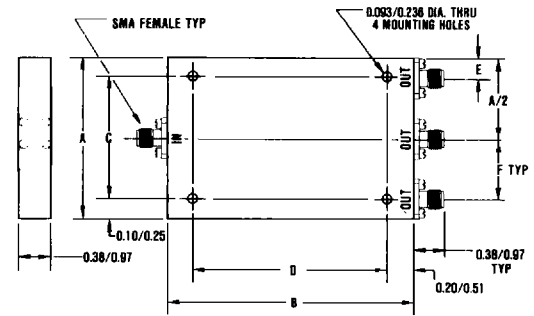


FIGURE 1
SERIES YT

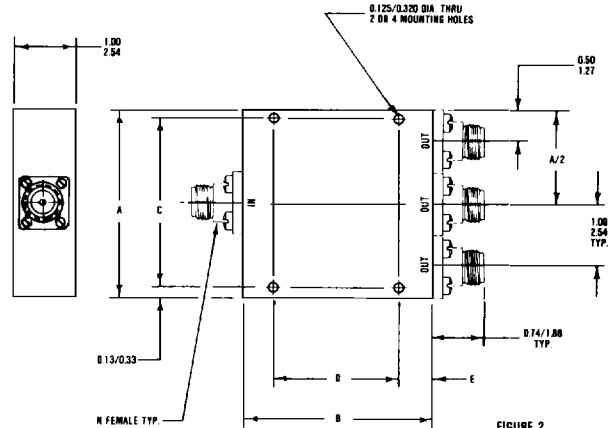


FIGURE 2
SERIES YT-N

**MECHANICAL OUTLINES—FIGURE 1
SMA CONNECTOR SERIES YT**

Outline	A Inches cm.	B Inches cm.	C Inches cm.	D Inches cm.	E Inches cm.	F Inches cm.
1	2.00	5.00	1.800	4.600	0.40	0.60
	5.08	12.70	4.572	11.684	1.02	1.52
2	2.00	4.00	1.800	2.600	0.40	0.60
	5.08	7.62	4.572	6.604	1.02	1.52
3	1.75	2.00	1.550	1.600	0.25	0.63
	4.45	5.08	3.937	4.064	0.64	1.59
4	1.64	1.50	1.550	1.100	0.38	0.50
	4.45	3.81	3.937	2.794	0.95	1.27

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

Outlines 5/6 on request.

**MECHANICAL OUTLINES—FIGURE 2
TYPE N CONNECTORS SERIES YT**

Outline	A Inches cm.	B Inches cm.	C Inches cm.	D Inches cm.	E Inches cm.
1	3.00	5.00	2.750	4.000	0.50
	7.62	18.70	6.990	10.160	1.27
2	3.00	3.00	2.750	2.000	0.50
	7.62	7.62	6.990	5.080	1.27
3	3.00	1.75	2.750	N/A	0.88
	7.62	4.45	6.990	2 Holes	2.24
4	3.00	1.25	2.750	N/A	0.63
	7.62	3.18	6.990	2 Holes	1.60

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