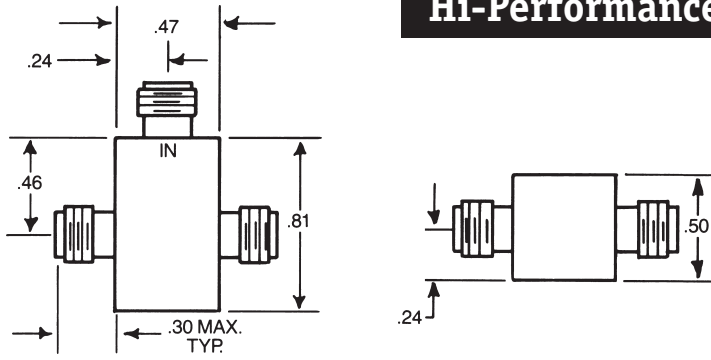


# Power Dividers-Resistive

Hi-Performance — "T" Configuration (DC-18GHz)



Model Number	Connectors	VSWR (max)		Insertion Loss (dB)		Amplitude Balance			Input Power
		DC-10	10-18	DC-10GHz	DC-18GHz	DC-4	4-10	10-18	
MDC2R06	SMA Female (3)	1.25	1.35	6 +1.20 / -0.20	6+1.50 / -0	0.20	0.40	0.50	1 watt max

# Power Dividers

Resistive, 2-W, 3-W, 4-W, 5-W

## Features

- 2-Way through 5-Way available
- All port symmetry
- Miniature, lightweight
- DC-26.5 GHz in a single unit (see page 4)
- Most meet MIL-E-5400/MIL-STD-202
- 2 watt CW, 100 watt peak power
- -55° C to +125° C

Broadband resistive power dividers include 2-Way through 5-Way devices. 50 Ω and 75 Ω units are available. All feature excellent stability over temperature, with good amplitude and phase matching between ports. The internal resistive configuration provides symmetry to allow port interchangeability. Dividers with BNC, SMA, type N and 2.9 mm (see page 4) connectors are available. Unless otherwise indicated, all connectors are female.

Model No.	Connectors	Frequency	Insertion Loss (dB)	VSWR (max.)	Figure
<b>2-WAY</b>					
MDC1195F3	SMA	DC-4	DC-2 GHz: 6 +/-0.3; 2-4 GHz: 6 +/-0.5	DC-2 GHz: 1.2:1; 2-4 GHz: 1.3:1	1
MDC1194F3B	BNC	DC-2	6 +/- 0.3	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
MDC1193F3A	N	DC-4	6 +/- 0.6	1.35:1	2
MDC1193F3A-6	N	DC-6	DC-4 GHz: 6 +/-0.4; 4-6 GHz: 6 +/- 0.7	1.4:1	2
MDC1194F3N/75	75Ω N	DC-2	6 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
MDC1194F3B/75	75Ω BNC	DC-2	6 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
<b>3-WAY</b>					
MDC1197F4	SMA	DC-4	9.5 +/- 0.5	1.5:1	1
MDC1197F4B	BNC	DC-2	9.5 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
MDC1197F4N	N	DC-2	9.5 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
MDC1197F4B/75	75Ω BNC	DC-2	9.5 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
MDC1197F4N/75	75Ω N	DC-2	9.5 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
<b>4-WAY</b>					
MDC1196F5	SMA	DC-2	DC-1 GHz: 12 +/-0.3; 1-2 GHz: 12 +/- 0.5	1.5:1	1
MDC1196AF5	SMA	DC-4	12 +/- 0.75	1.5:1	1
MDC1196F5B	BNC	DC-2	12 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
MDC1196F5N	N	DC-2	12 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
MDC1196F5B/75	75Ω BNC	DC-2	12 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
MDC1196F5N/75	75Ω N	DC-2	12 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
<b>5-WAY</b>					
MDC1198F6	SMA	DC-1.5	DC-1 GHz: 14 +/- 0.3; 1-2 GHz: 14 +/- 0.5	1.2:1	1
MDC1198F6B	BNC	DC-2	14 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
MDC1198F6N	N	DC-2	14 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
MDC1198F6B/75	75Ω BNC	DC-2	14 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2
MDC1198F6N/75	75Ω N	DC-2	14 +/- 0.5	DC-1 GHz: 1.3:1; 1-2 GHz: 1.4:1	2

**Note:** See New Products Section for 18 GHz Type N and 26.5 GHz 2.9 mm dividers, and next page for additional 2-Way choices, including 75 Ω TNC.

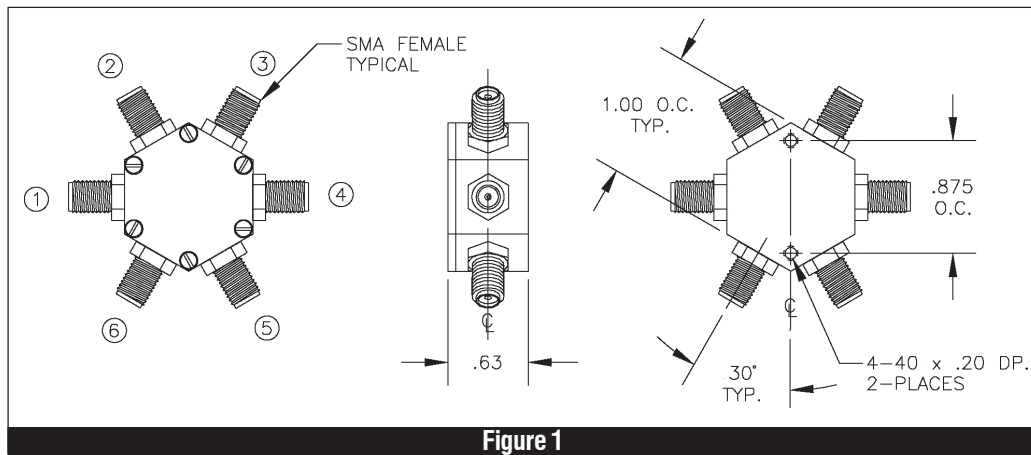


Figure 1

### Connectors Used:

- 2-way: 1, 3, 5
- 3-Way: 1, 3, 4, 5
- 4-Way: 1, 2, 3, 5, 6
- 5-Way: 1, 2, 3, 4, 5, 6

# Power Dividers

## Resistive, Additional 2-Way Units

Model Number	Connectors	Frequency	Insertion Loss (dB)	VSWR (Max.)	Figure
<b>2-WAY</b>					
MDC1193AF3-1	N	DC-1	6 +/- 0.3	DC-2 GHz: 1.2:1; 2-4 GHz: 1.3:1	Note 1
MDC1193AF3-2	N	DC-2.55	DC-1 GHz: 6 +/- 0.3; 1-2.55 GHz: 6 +/- 0.5	DC-0.5 GHz: 1.1:1; 0.5-2.55 GHz: 1.3:1	Note 1
MDC1194AF3/75	75Ω BNC	DC-1	DC-0.5 GHz: 6 +/- 0.2; 0.5-1 GHz: 6 +/- 0.4	DC-0.5 GHz: 1.2:1; 0.5-1 GHz: 1.3:1	Note 1
MDC1194AF3T/75	75Ω TNC	DC-1	DC-0.5 GHz: 6 +/- 0.2; 0.5-1 GHz: 6 +/- 0.4	DC-0.5 GHz: 1.2:1; 0.5-1 GHz: 1.3:1	Note 1

**Note 1:** Not Shown. Consult factory for outline drawing. These units are 1 Watt average, 1 KW peak (-40 C° to +85° C).

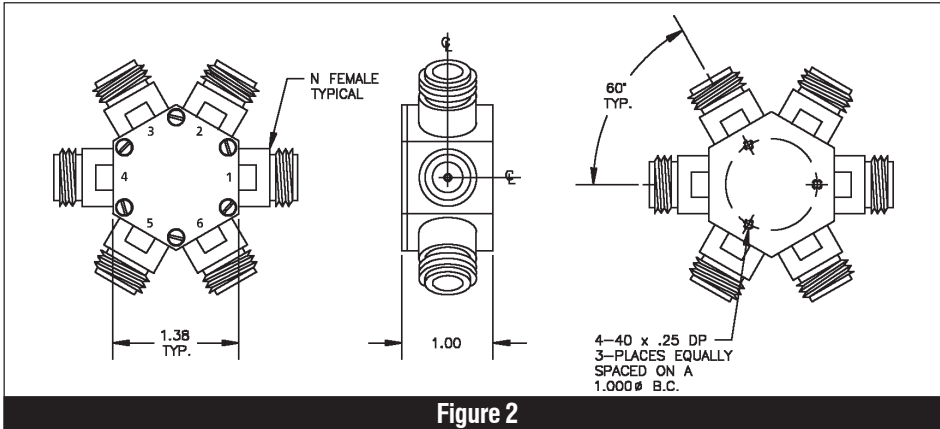


Figure 2

### Connectors Used:

- 2-way: 1, 3, 5
- 3-Way: 1, 3, 4, 5
- 4-Way: 1, 2, 3, 5, 6
- 5-Way: 1, 2, 3, 4, 5, 6

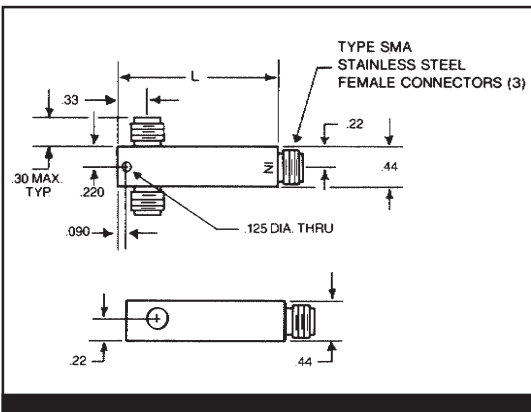
# Power Dividers

## Isolated In-Phase 2 Way — Ultra Broadband “T” Configuration

### Features

- Very broadband in a single package
- Excellent phase balance
- Low cost
- Small size & weight
- High Isolation
- Delivery from stock

**MIDISCO** Ultra-Broadband power dividers offer either 1-20GHz or 2-26.5 GHz in a single package. Featuring high isolation and low insertion loss, both models are very small but ruggedly constructed. Both may also be used as combiners and have SMA female connectors.



Model Number	Freq. Range (GHz)	Insertion Loss (dB) max	Amplitude Balance (dB) max	Phase Balance (deg) max	VSWR		Isolation (dB) min	Input Power (W) max	Length (L) (inches)
					Input	Output			
MDC2P06	1-1.5	0.50	0.20	1	1.70:1	1.50:1	10	10	1.75
	1.5-2	0.50	0.20	1	1.60:1	1.40:1	15	10	1.75
	2-4	0.40	0.20	1	1.50:1	1.30:1	20	10	1.75
	4-8	0.50	0.20	1.5	1.50:1	1.40:1	17	10	1.75
	8-15	0.80	0.30	2	1.70:1	1.50:1	15	10	1.75
	15-16	0.80	0.30	3	1.70:1	1.60:1	15	10	1.75
	16-18	0.90	0.40	4	1.80:1	1.90:1	14	10	1.75
MDC2P86	18-20	1.10	0.40	4	2.00:1	2.00:1	7	10	1.75
	2-2.5	0.30	0.30	2	1.50:1	1.20:1	15	10	1.50
	2.5-20	1.00	0.40	4	1.30:1	1.30:1	20	10	1.50
	20-26.5	1.50	0.40	6	1.50:1	1.50:1	15	10	1.50

# Power Dividers

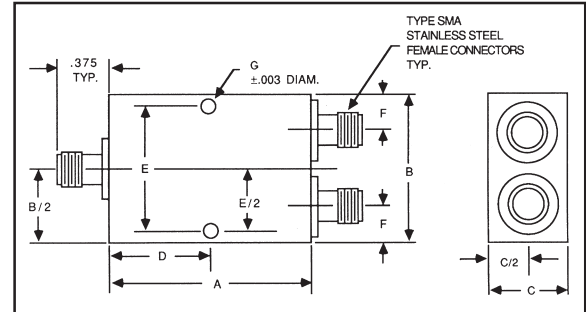
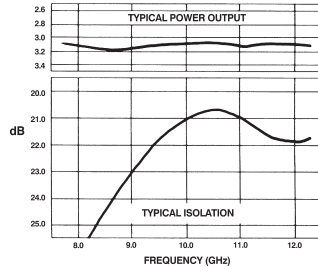
## Isolated In-Phase 2 Way — 0.5-26.5 GHz

### Features

- Use as divider or combiner
- Low insertion loss & VSWR
- Flat frequency response
- Excellent phase and amplitude tracking
- High isolation
- RF shielded
- Constructed to exceed MIL-E-5400 & MIL-E-16400
- Type N connector models available
- Delivery from stock

miniature stripline power dividers provide high isolation in-phase division of input power between output ports. These low VSWR units are contained within precision machined housings that are designed to provide high RF shielding and eliminate unwanted RF modes.

Standard models have three SMA female connectors. Other frequency ranges, 4, 8 or 16 way configurations, and different connector types are available. Consult factory for 26.5 GHz units.



Outline	A	B	C	D	E	F	G
1	1.00	1.00	0.50	0.50	0.64	0.25	.104
2	1.50	1.50	0.50	0.75	1.31	0.25	.104
3	2.00	1.50	0.50	1.00	1.31	0.25	.104
4	1.50	2.50	0.50	0.53	2.31	0.75	.104
5	1.62	1.00	0.38	0.75	0.85	0.25	.104
6	3.00	1.50	0.50	1.50	0.66	0.25	.125

Model Number	Freq. Range (GHz)	Insertion Loss (dB) max	Amplitude Balance (dB) max	Phase Balance (deg) max	VSWR max		Isolation	Input Power (W) Load VSWR			Outline Dwg. No.
					Input	Output		1.2	2.0	∞	
MDC2223	0.5-1	0.20	0.2	2.0	1.20	1.10	22	30	20	1	4
MDC2224	1-2	0.25	0.2	3.0	1.25	1.20	22	30	20	1	2
MDC2225	2-4	0.30	0.2	4.0	1.30	1.30	20	30	10	1	2
MDC2245A	0.5-4	0.50	0.2	4.0	1.30	1.20	20	30	10	1	6
MDC2263	3-5	0.35	0.2	4.0	1.30	1.30	20	30	10	1	2
MDC2226	4-8	0.35	0.2	4.0	1.30	1.30	20	30	10	1	1
MDC2266	2-8	0.40	0.2	4.0	1.35	1.35	20	30	10	1	3
MDC2227	7-12.4	0.40	0.2	4.0	1.30	1.35	20	30	10	1	1
MDC2288	12-18	0.60	0.2	5.0	1.35	1.40	20	30	10	1	1
MDC2289	8-18	0.60	0.2	5.0	1.35	1.40	20	30	10	1	1
MDC2290	6-18	1.00	0.2	5.0	1.50	1.50	18	30	10	1	5
MDC2269	2-18	1.00	0.3	5.0	1.50	1.50	17	30	10	1	5

# Power Dividers

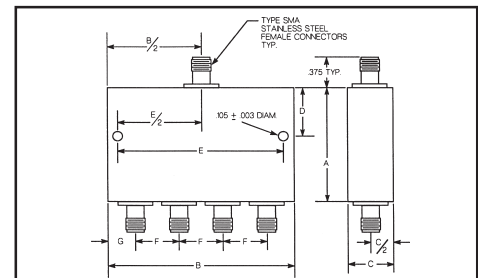
## Isolated In-Phase 4 Way — 0.5-26.5 GHz

### Features

- Low VSWR, insertion loss
- Flat frequency response
- Excellent phase and amplitude tracking
- Wide bandwidth
- Useable as combiner
- RF shielded
- Constructed to exceed MIL-E-5400 & MIL-E-16400
- Type N connector models available

miniature stripline power dividers provide high isolation in-phase division of input power between output ports. These low VSWR units are contained within precision machined housings that are designed to provide high RF shielding and eliminate unwanted RF modes.

Standard models have five SMA Female connectors. Other frequency ranges, configurations, and connector types are available. Consult factory for 26.5 GHz units.



Outline	A	B	C	D	E	F	G
1	1.28	2.75	0.50	0.64	2.06	0.69	0.34
2	1.78	2.75	0.50	0.89	2.06	0.69	0.34
3	2.00	2.00	0.38	1.00	1.70	0.50	0.25
4	2.20	2.65	0.50	1.10	2.45	0.65	0.35
5	2.50	2.75	0.38	1.25	2.50	0.69	0.34
6	2.85	2.00	0.38	.95/1.9	1.70	0.50	0.25
7	3.40	3.60	0.50	1.70	3.40	1.00	0.30
8	3.70	4.00	0.50	1.85	3.70	1.10	0.35

Model Number	Freq. Range (GHz)	Insertion Loss (dB) max	Amplitude Balance (dB) max	Phase Balance (deg) max	VSWR max		Isolation (dB) min	Input Power (W) Load VSWR			Outline Dwg. #
					Input	Output		1.2	2.0	∞	
MDC2423	0.5-1	0.40	0.4	4.0	1.30	1.20	20	30	20	3	7
MDC2424	1-2	0.60	0.3	5.0	1.60	1.35	20	30	20	3	5
MDC2425	2-4	0.60	0.6	6.0	1.50	1.50	18	30	10	1	4
MDC2463	3-5	0.50	0.3	4.0	1.35	1.30	20	30	10	1	2
MDC2426	4-8	0.40	0.3	4.0	1.40	1.25	20	30	10	1	3
MDC2466	2-8	0.80	0.4	7.0	1.50	1.40	16	30	10	1	8
MDC2427	7-12.4	0.80	0.6	6.0	1.50	1.50	16	30	10	1	1
MDC2488	12-18	1.50	0.6	6.0	1.50	1.50	18	30	10	1	3
MDC2489	8-18	1.50	0.6	6.0	1.50	1.50	18	30	10	1	3
MDC2469	2-18	2.00	0.6	6.0	1.60	1.50	14	30	10	1	6