

Power Dividers

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

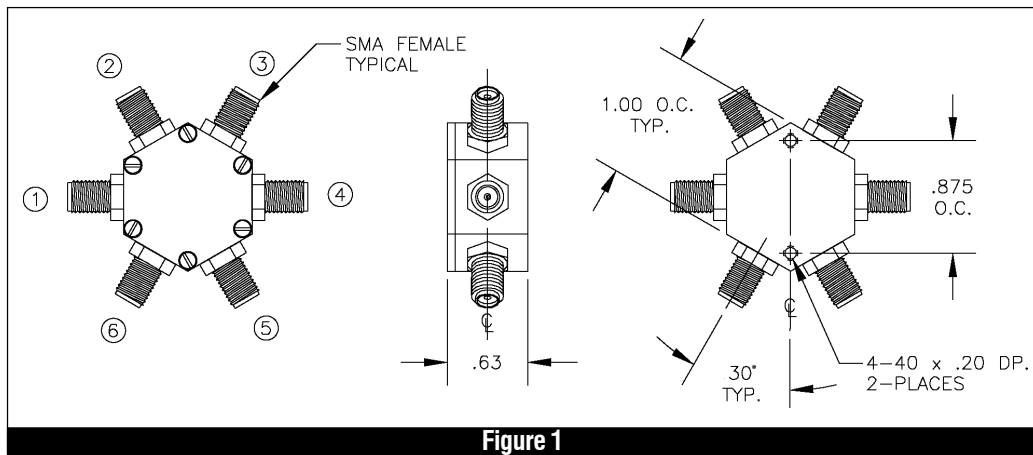
Features

- 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

MIDISCO 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
2-WAY					
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
3-WAY					
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
4-WAY					
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
5-WAY					
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.



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
2-WAY					
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).

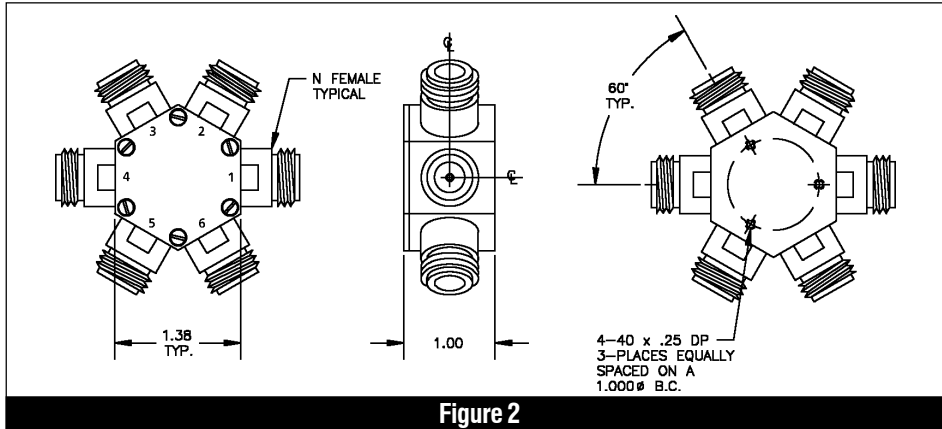


Figure 2

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

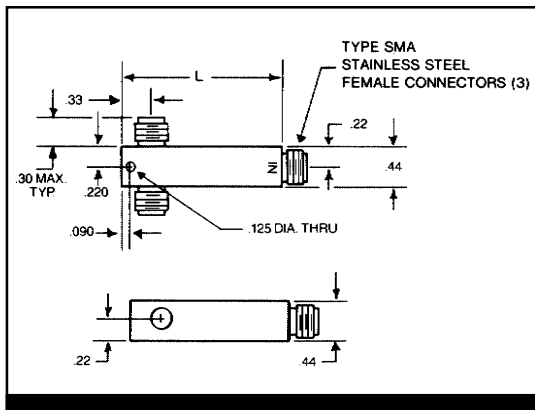
Power Dividers

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