

Power Combiners / Dividers

PCS POWER COMBINERS / DIVIDERS

- New PCS Tx Models; 2-Way, 3-Way and 4-Way
- PCS Rx models; 2-Way, 3-Way, 4-Way and 6-Way
- Full Rated Power Capacity into Severe Mismatch with Non-Coherent Input Signals
- <1.3:1 VSWR; >20 dB Isolation, Insertion Loss <0.8 dB Max



DESCRIPTION

A new series of compact, rugged PCS power dividers/combiners are ideal for sectorizing antenna patterns and are used for site expansion needs. Design is based on a Wilkerson circuit with a proprietary design applied to ensure adequate thermal dissipation under full rated power conditions. Units are designed to be used as a combiner with non-coherent input signals when the unit

is provided with a heat sink which insures that the case temperature does not exceed 85°C

Special versions are available with higher power ratings and increased isolation. Integral isolators can be incorporated into custom models to provide isolation as high as 55 dB port-to-port. Contact your regional sales engineer or representative.

SPECIFICATIONS

2, 3, 4 and 6-Way Power Combiners/Dividers with Type "N" Connectors

N	APPLICATION	FREQUENCY RANGE MHz	MODEL NO.	VSWR		INSERTION LOSS dB (Max)		ISOLATION dB (Min)	AMP BAL dB (Max)	PHASE BAL Degrees (Max)	TOTAL INPUT POWER**				WT g (Max)
				INPUT (Max)	OUTPUT (Max)	EXCLUDING COMB LOSS	INCLUDING COMB LOSS*				POWER DIVIDER OPERATION PORT J1		POWER COMBINER OPERATION MAX POWER PER PORT		
											AVG. W	PEAK kW	AVG. W	PEAK kW	
2-WAY	Tx + Rx	1800-2000	2362-2	1.3:1	1.2:1	0.5	3.5	20	0.2	±6.0	80	3	40	1.3	140
3-WAY	Tx + Rx	1800-2000	2362-3	1.3:1	1.2:1	0.6	5.4	20	0.2	±10.0	80	3	27	1	230
4-WAY	Tx + Rx	1800-2000	2362-4	1.3:1	1.2:1	0.8	6.9	20	0.2	±6.0	100	3	25	.75	310
6-WAY	Rx only	1800-2000	2362-6	1.3:1	1.2:1	0.7	8.5	20	0.3	±5.0	0.5	3	0.5	3	400

* Combined Loss is additional power loss due to noncoherent input signals (F_{12}, F_{23}, F_{34}). There is no combined loss when input frequencies are equal and in phase.

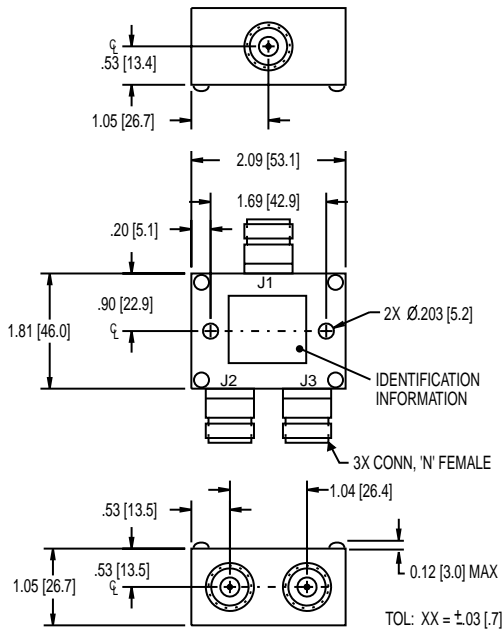
** Case Temperature must be limited to 85°C maximum, cooling fan may be required

Note: Please contact the factory regarding inquiries for combining more than 4 signals at the full rated power of the devices.

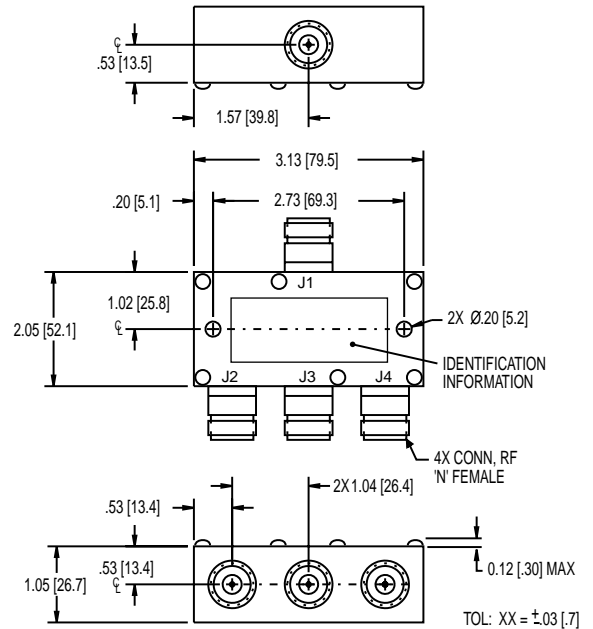
6, 8, and 16-way combiners can be built on a custom basis.

Power Combiners / Dividers

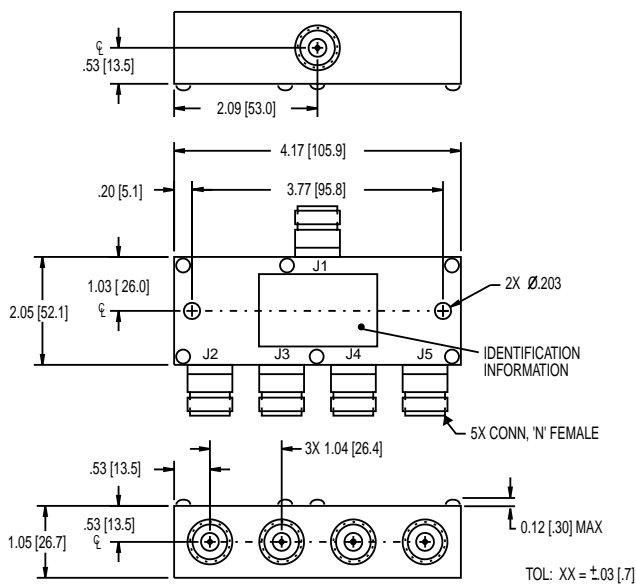
OUTLINE DRAWINGS



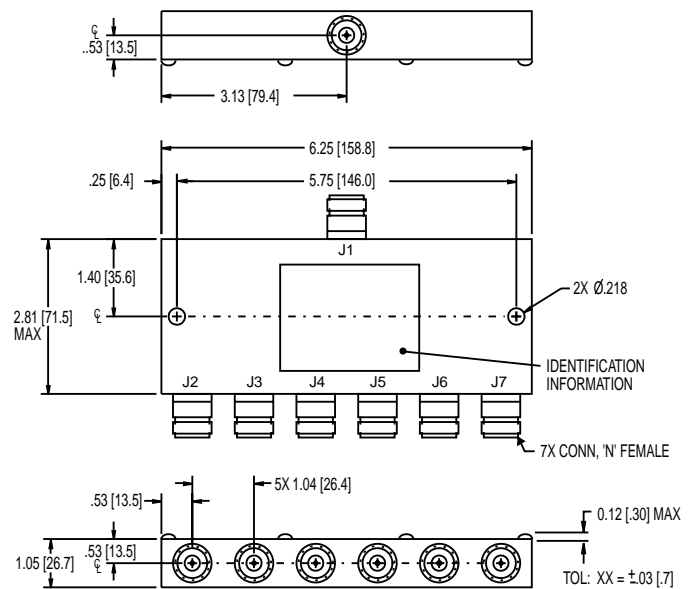
2362-2



2362-3



2362-4



2362-6