

Power Combiners / Dividers

CELLULAR Tx POWER COMBINERS / DIVIDERS

- 25 Watt thru 500 W CW Discrete Combiners/ Dividers
- Operates at Full Power into Severe Mismatch
- Full-Rated Power Rating with Non-Coherent Input Signals
- <1.3:1 VSWR; >20 dB Isolation, Insertion Loss <0.4 dB Typical
- Ideal for Sectorizing Antenna Patterns



DESCRIPTION

Narda medium and high power cellular band power combiner/dividers are capable of distributing medium and high power Tx signals without tuning constraints or size constraints. Most significantly, these devices can withstand full-rated power even if the output circuit is opened or short circuited. Consequently, these models are ideal for antenna feed circuits. Other models are available for other cellular bands.

Isolation is typically in the 25 dB range and return loss is typically in the 20 dB range. Insertion loss, exclusive of signal combination loss, is less than 0.5 dB.

Special versions offer high isolation with 40 dB and 60 dB versions available on special request. These units make use of Narda' single-junction and dual-junction isolators.

Hybrid Combiner Networks are also available to custom specifications (see page 26). High power 200 W or 500 W hybrids are provided in a 19½" rack assembly complete with cabling and terminations (isolators can also be provided), to combine two through six channels of high power level Tx signals.

Contact Narda's regional sales engineers for details on these high-performance products.

SPECIFICATIONS

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

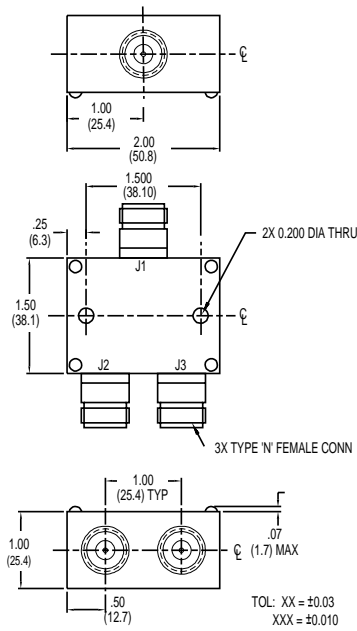
N	FREQUENCY RANGE MHz	MODEL NO.	VSWR		INSERTION LOSS dB (Max)		ISOLATION dB (Min)	AMP BAL dB (Max)	PHASE BAL Degrees (Max)	TOTAL INPUT POWER**				WEIGHT g (Max)
			Input (Max)	Output (Max)	EXCLUDING COMB LOSS	INCLUDING COMB LOSS*				POWER DIVIDER OPERATION PORT J1		POWER COMBINER OPERATION MAX POWER PER PORT		
										AVG. WATTS	PEAK KW	AVG. WATTS	PEAK KW	
2-WAY	820-915	30402	1.3:1	1.2:1	0.5	3.5	20	0.2	±3.0	80	3	40	1.3	140
3-WAY	820-915	30403	1.3:1	1.2:1	0.6	5.4	20	0.2	±5.0	80	3	27	1	230
4-WAY	820-915	30373	1.3:1	1.2:1	0.6	6.6	20	0.2	±3.0	100	3	25	.75	310

* Combined Loss is additional power loss due to noncoherent input signals ($F_1 \neq F_2 \neq F_3$). There is no combined loss when input frequencies are equal and in phase.

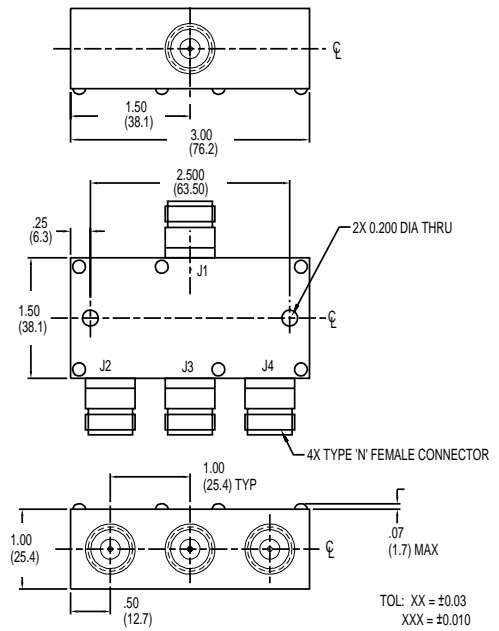
** Case Temperature must be limited to 85°C maximum, cooling fan may be required

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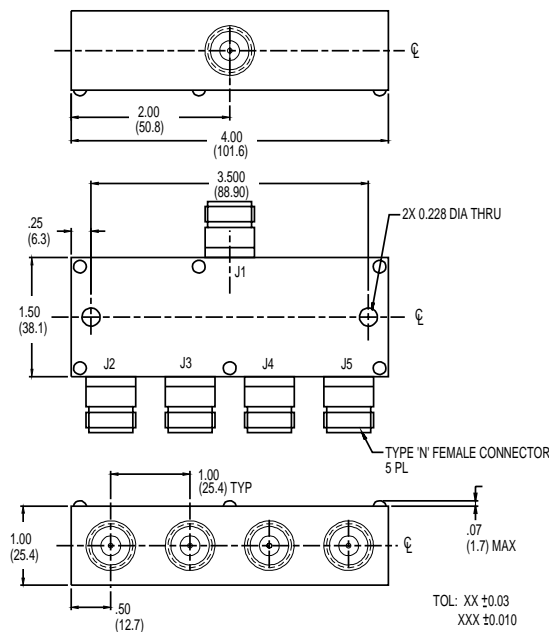
OUTLINE DRAWINGS



30402



30403



30373