

## High Power Components

### *Directional Couplers, Hybrids, Terminations and Attenuators*

Narda offers a broad range of high power passive products which are widely used in power test equipment and for military systems requirements. Many of the Narda high power passive products are available as catalog-stock items and are described in the appropriate section of this catalog. Special high power products are also available in which Narda has an established design it manufactures in reasonable quantity but, due to the unique or limited requirements, the product is only produced on a custom-order basis.

Important facets of Narda high power passive products are drawn from:

**Power Test Facility:** The high power test laboratory at Narda's Hauppauge facility provides the resources to perform both Narrowband and Broadband testing for new product development, our customers' special testing requirements, and our own total quality programs.

**Environmental Testing and Quality Assurance:** The Narda high power product can be tested on the premises under the rigors of most severe MIL-SPEC requirements. Routine in-house tests include temperature-cycling, thermal shock, and random vibration. As a supplement to our in-house capabilities, Narda has well established relationships with several local area certified Environmental Laboratories.

Narda's Quality Assurance Program meets the requirements of ISO 9001:2008 and AS 9100:2009. From a flight-qualified high power product for a complicated EW System, to an unconventional device to handle extraordinarily high microwave power for a commercial transmitter, Narda has the resources to meet your high power passive product requirements.

MODEL	FREQUENCY RANGE (GHz)	AVERAGE POWER RATING (W)	CONNECTOR
<b>Attenuators</b>			
752 Series	DC - 3	5	Type N
765A Series	DC - 5	50	Type N
769A Series	DC - 6	150	Type N
770A Series	DC - 18	100	Type N
776C Series	DC - 18	50	Type N
4776 Series	DC - 18	4.5	SMA
<b>Directional Couplers</b>			
3000-30	0.225 - 0.460	500	Type N
3001	0.460 - 0.950	up to 500	Type N
3002	0.950 - 2	up to 500	Type N
3003	2 - 4	up to 500	Type N
3004	4 - 10	up to 500	Type N
3020A	0.05 - 1	500	Type N
3022	1 - 4	500	Type N
3024	4 - 8	500	Type N
3045C	7 - 12.4	100	Type N
3060	2 - 18	200	Type N
4196-20	6 - 18	100	SMA
30300D	0.820 - 0.960	500 CW	Type N
30470	0.820 - 0.960	500 CW	Type N
30600	0.820 - 0.980	500	Type N
27000	2 - 18	400	Type N
27001A	6 - 18	400	Type N
27002	2 - 8	400	Type N
27003	2 - 18	400	TNC
27004A	6 - 18	400	TNC
27005	2 - 8	400	TNC
27002SC	2 - 8	1000	SC
27005SC	2 - 8	1000	SC
<b>Power Dividers / Combiners</b>			
4306-2	6 - 18	75	SMA
3306-2	6 - 18	100	Type N
2372A-2	0.5 - 2.5	250	Type N
2382-2	0.5 - 6	250	Type N
30402	0.820 - 0.915	80	Type N
30403	0.820 - 0.915	80	Type N
30373	0.820 - 0.915	100	Type N
2362-2	1.8 - 2	80	Type N
2362-3	1.8 - 2	80	Type N
2362-4	1.8 - 2	100	Type N
<b>Quadrature Hybrids</b>			
3322	0.82 - 0.98	500	Type N
3032	0.95 - 2	200	Type N
3033B	1.7 - 4.2	200	Type N
4096	6 - 18	125	SMA
<b>Terminations</b>			
369BNM	0.7 - 18	175	Type N
368BNM	2 - 18	500	Type N
366NM	DC-18	100	Type N
4366M	DC-18	100	SMA
366TNCM	DC-18	100	TNC

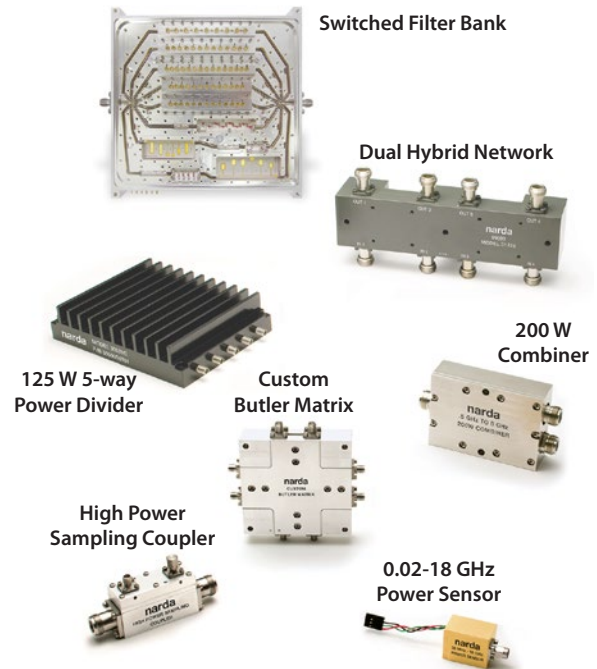
## Narda is More Than Just Catalog Components

### Custom Engineered Components and Networks

In addition to providing the finest off-the-shelf catalog products, Narda has been supporting military and commercial customers for decades with thousands of custom-engineered solutions. A Narda “special” passive product has been the solution of choice for decades—field proven in the harshest of environments.

While your selection of one of our rugged and reliable catalog devices remains the best, most efficient choice for all parties, we excel at meeting your additional needs with our special model catalog derivatives, or with completely unique multifunctional designs.

Please contact your local rep or the factory today for additional details.



## Environmental Performance for Selected Passive Products\*

PARAMETER	SPECIFICATION
Operating Temperature	-54 to +105°C
Storage Temperature	-55 to +125°C
Humidity	Per MIL-STD-202F, method 103B, condition B (96 hours at 95% R.H.)
Shock	Per MIL-STD-202F, method 213B, condition J (30G, 11 msec)
Altitude	Per MIL-STD-202F, method 105G, condition B (50,000 feet)
Vibration	Per MIL-STD-202F, method 204D, condition B (.06" double amplitude or 15G, which ever is less)
Thermal Shock	Per MIL-STD-202F, method 107D, condition A (5 cycles)

\* Applicable to Stripline Directional Couplers, Attenuators, Power Dividers

Note: This is an exclusive listing. Where otherwise noted in the catalog, the above environmental performance may not apply. Not applicable for those products designed for commercial applications. Many of our catalog off-the-shelf (COTS) products have the ability to withstand considerably more stringent environments. If you have special environmental requirements, please contact the Sales Department at Narda.