

Amphenol SV MICROWAVE[®]

RF Connectors & Components

High Power Components

FEATURES & BENEFITS

High temperature dielectric materials

Custom connector bodies designed to dissipate heat

Large center contact connector series available

HN, 7-16 and SC series available

APPLICATIONS

High Power Military Radars

Satellite Communication Equipment

Semi-conductor Equipment Manufacturing

High Power Lasers



High Power Components

High Power Components

SV Microwave manufactures high power coaxial connectors and components for various applications. When specifying power for a connector, it is important to indicate whether it is a peak power or average power requirement. Peak power is more a function of the voltage breakdown path of the connector, while average power is determined by the ability of the connector to handle elevated temperatures.

Determining the exact average power of a connector is difficult, as there are many factors that contribute to the power derating of a connector. Average power is dependent on frequency, altitude, input load VSWR and ambient temperature. Connector power handling can be increased by using special fiberglass reinforced PTFE dielectrics such as Fluoroloy® H or boron nitride. Heat sink fins may be part of the connector design to dissipate heat away from the center conductor of the connector.

Specifications

The list below represents both peak power and average power ratings for typical connector interfaces. Please note that in many cases the average power handling can be greater depending on other outside factors.

Average Power Ratings and Peak Power Ratings

Series	100 MHz	500 MHz	1GHz	5 GHz	Peak power (kW)
SMA	550	225	170	60	1.2
BMA	550	225	170	60	1.2
BZ (L)	800	375	250	-	2.7 (DC-12.4) 6.7 (DC-2)
ZMA (L)	800	375	250	-	2.7 (DC-12.4) 6.7 (DC-2)
TNC	1,800	1,375	875	333	2.8
Type N	3,000	1,750	1,050	500	4.9
C	3,500	2,150	1,500	700	11
SC	3,500	2,150	1,500	700	11
7/16	5,000	2,750	1,800	900	20
HN	3,800	2,300	1,600	-	31
LC	6,800	3,600	2,500	-	31
HV-LC	6,800	3,600	2,500	-	130
7/8 EIA	5,500	2,800	1,850	-	44
1 5/8	13,000	6,800	-	-	150

Fluoroloy® is a registered trademark of Saint-Gobain Corp.