

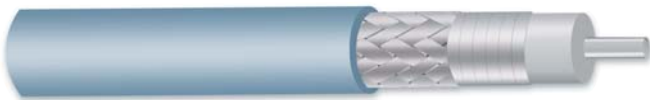
# High Performance Cable

## Military, Aerospace, Medical, Test and Measurement

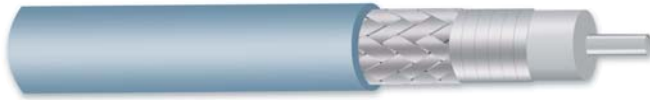
The **High Performance Product Line** includes five series of cables suitable for applications with the most stringent mechanical, electrical or environmental requirements, up to 90 GHz. Low loss, low VSWR, high power, high temperature, flexibility and phase stability are all examples of the many special requirements this product line is suited for. Because of the custom nature of these cables, Semflex also makes available a large selection of connectors.



## Cable Selection



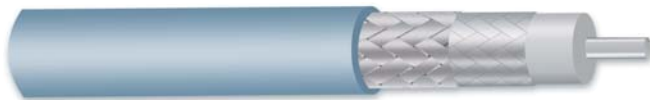
**LA Series** - Lowest loss cable available to 18 GHz, excellent phase stability with flexure and temperature, robust mechanical construction.



**RH Series** - Instrument grade, excellent phase stability with flexure and temperature.



**HP Series** - Best all around choice for microwave test and interconnect cables. Low loss and VSWR to 55 GHz, toughest mechanical construction.



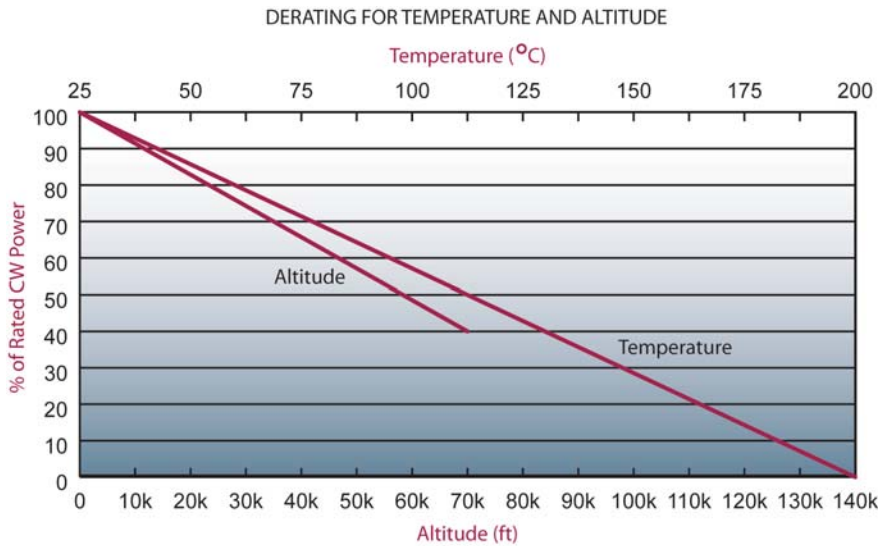
**SW Series** - Good electrical performance, low loss to 129 GHz. Simplified connector attachments and assembly methods.



**KW Series** - High power, low loss, high flexibility compared to air dielectric corrugated cables.

## Power Handling

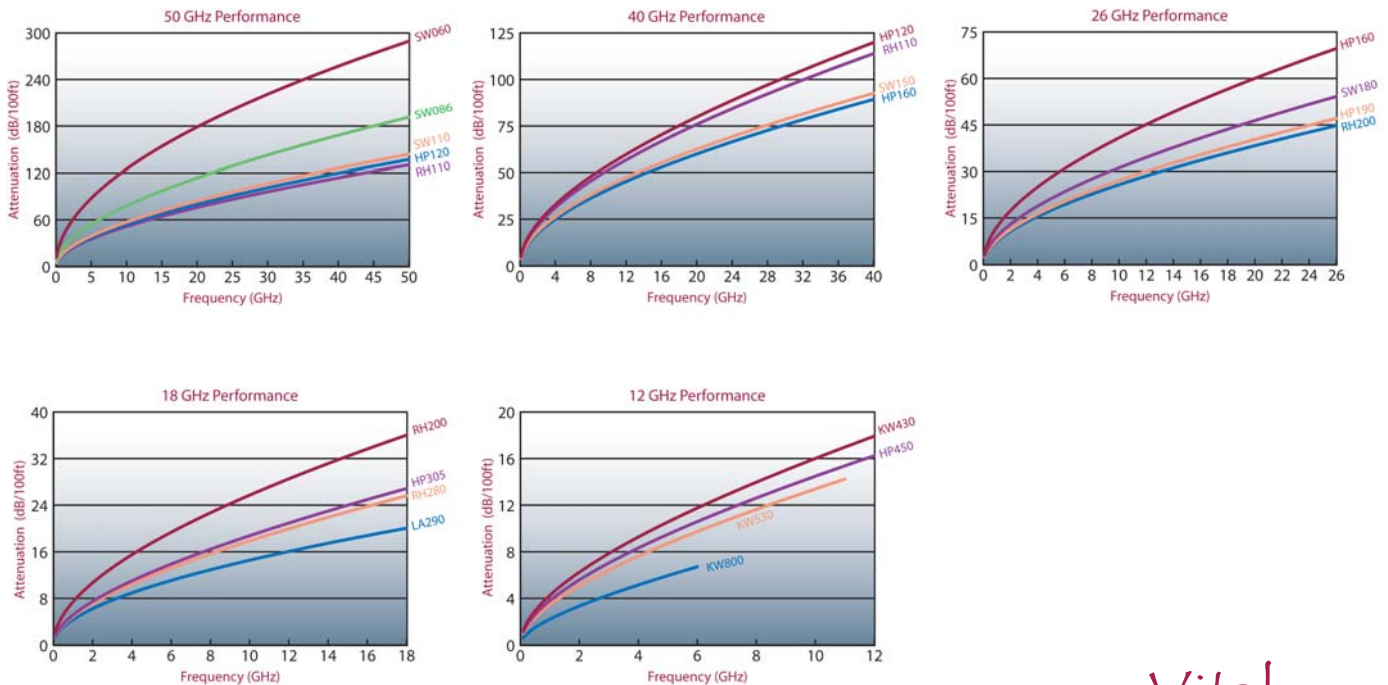
Average power ratings for coaxial cables are highly dependent on the long term operating temperature of the dielectric material. Semflex's published average power ratings are based on VSWR of 1.0:1, at sea level and an ambient temperature of 25 degrees C. The base line power ratings can be adjusted to meet the actual conditions by using the derating factors for both temperature and altitude from the chart below.



Connector	Avg Power (KW)	Peak Power (KW)
SMA	.1	2.5
BNC	.1	5.6
TNC	.3	5.6
UHF	.3	10
N	.6	10
HN	.6	40
SC	1.2	44
7/16 DIN	3.0	40
4.1/9.5 DIN	1.2	16
LC	3.5	63
7/8" EIA	4.2	90
1-5/8" EIA	5.2	305

Average power ratings of connector interfaces are typical for most applications and based on 900 MHz.

## High Performance Comparison Data



"The difference starts with the cable..."