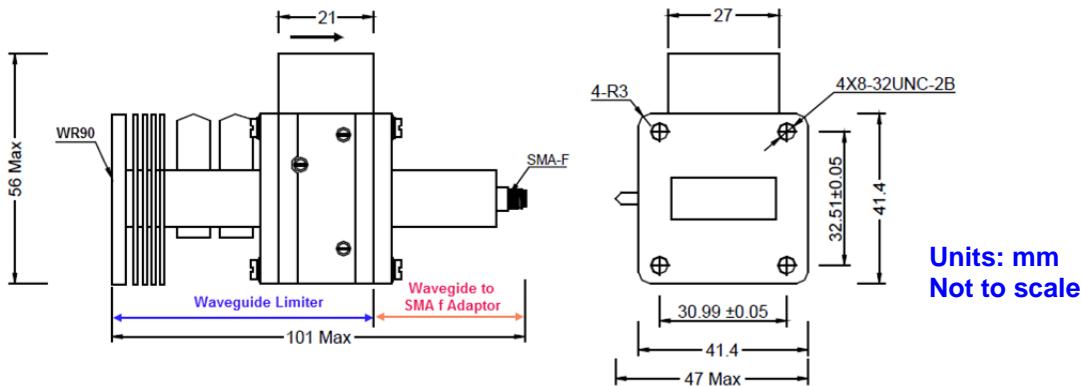


Waveguide Limiter, 9.2-10.2 GHz WR90 Package to SMA Female Connector, 12 Kilowatts Peak



Order Examples: RLIM-9.2-10.2-WR90-SMAf-12kW Pk-RAL7045-r12

Description: (Waveguide Limiter, 9.2-10.2 GHz, WR90 Package to SMA female Connector, 12 Kilowatts Peak, Navy Gray Color (RAL 7045))

ELECTRICAL SPECIFICATIONS @25°C:		
Parameter		Units
Frequency range	9.2-10.2	GHz
Peak Power (Fault condition)	30KW peak power, 4% Duty Cycle, 32 ms Pulse width min	KW max
Peak Power (Normal condition)	12KW, 4% Duty Cycle, Pulse Width: 32ms	KW max
Duty Cycle	4 Pulse Width: 32ms	% max
Insertion loss	0.8 @ -10dBm max input power	dB max
Flatness Leakage 0.1 erg Energy max	+10	dBm max
Spike Leakage 0.1 erg Energy max	+17	dBm max
VSWR Input/ Output	1.4: 1 max @ -10dBm max input power	Ratio max
3dB Recovery Time	3	us max
Pulse Width	16	ms max
Phase Matching	The difference between any two Limiter shall be within: ±15 deg	
High Power test	12KW Peak Power, 4% Duty Cycle, Pulse Width: 32ms. Customer will do the high power test and ESS environmental ESS testing after received the shipment. provide a quantity assurance certificate to guarantee the products meet the requested specs 100%.	GBNT Guaranteed but not individually tested

Normal Power Test Data to be provided with each item shipping

Marking Method Vinyl Label to be fitted

Above spec do not include Waveguide to SMA Adaptor spec.

ENVIRONMENTAL RATINGS:			
Parameter		Units	
Operating Temperature	-40 to +75	°C	GBNT
Non-Operating Temperature	-55 to +125	°C	GBNT
Relative humidity (non-condensing)	0 to 100% relative humidity. (operating and non-operating)	%	GBNT
Altitude (MIL-STD_810F)	10000 – 30000	feet	GBNT
amplitude and duration	as 20g, 11 milliseconds of terminal saw tooth wave-form		GBNT
Shock/ (MIL-Std_810F)	Airborne		GBNT
Vibration (MIL-Std_810F)	Airborne		GBNT
Pressurization	30	Psig min	

RLIM-9.2-10.2-WR90-SMAf-12kW Pk-RAL7045-R1-r12 Specifications may be subject to change

07/05/18

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.

Tel: (408) 266-7404

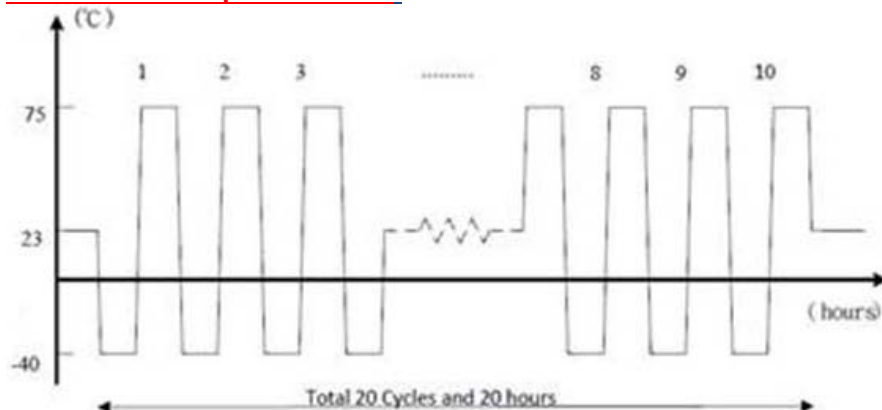
FAX: (408) 266-4483

WEB: www.raditek.com

E-mail: sales@raditek.com

Waveguide Limiter, 9.2-10.2 GHz WR90 Package to SMA Female Connector, 12 Kilowatts Peak

Thermal Shock Specifications: GBNT



Temperature variability: greater than or equal to 15 degrees C / min

Keep 3 hours for Higher temperature and 3 hours for Lower temperature (Total 6 hours for each cycle)

Number of cycles: 10 times (Total 60 hours)

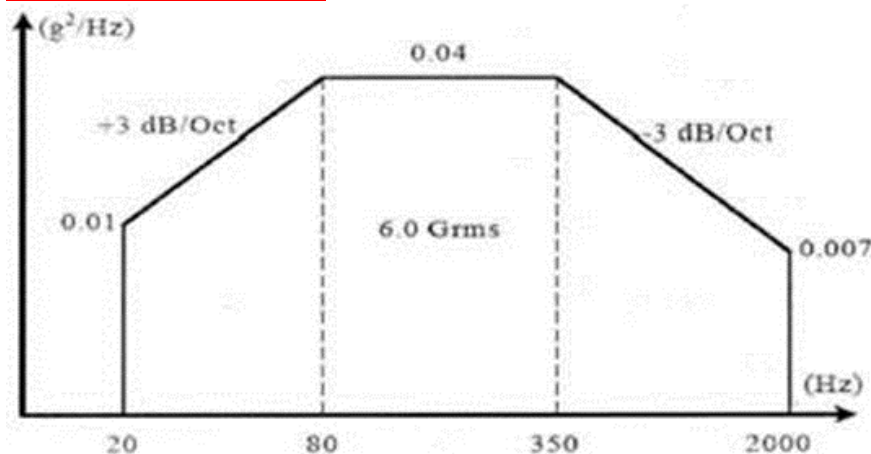
Low Temperature Meet MIL-STD-810F test method, method 502, process II.

High Temperature Meet MIL-STD-810F test method, method 501, process II.

Functional test: At the time of both before screening and after the screening.

The equipment shall be subjected to the functional test before, During and after this test to demonstrate compliance with the requirements as specified.

Vibration Specifications: GBNT



Vibration: No resonance between 205 to 2000 Hz. Parts must be capable of withstanding without degradation continuous vibration of 1.3G's at 25Hz for a period not less than 2 hours in any direction.

Random vibration: 6 Grms

Spectrum: +3dB /Oct, 20-80Hz, 0.04g²/Hz, 80-350Hz, -3dB/OCT, 350-2000Hz.

Screening time: 10 minutes / 1 Axial and 3 Axial.

Screening Axial: 3

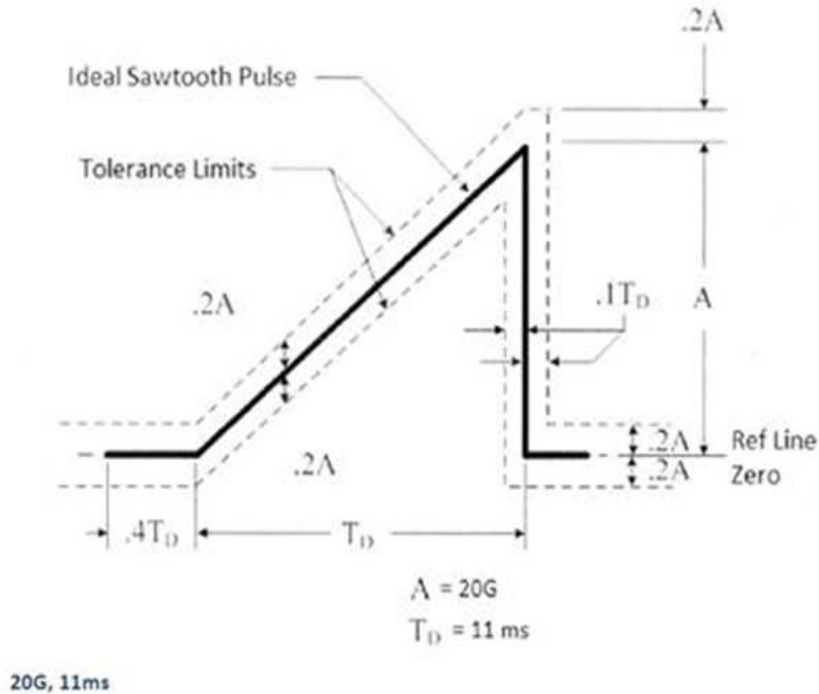
Functional test: At the time of both before screening and after the screening.

The test procedure is carried out in accordance with the provisions of MIL-STD-810F Test Method 514, Procedure I

Waveguide Limiter, 9.2-10.2 GHz WR90 Package to SMA Female Connector, 12 Kilowatts Peak

The equipment shall be subjected to the functional test before, During and after this test to demonstrate compliance with the requirements as specified.

Shock Specifications: GBNT



The equipment shall be comply with the shock requirements, the amplitude and duration shall be specified as 20g, 11 milliseconds of terminal sawtooth wave-form, show in Figure.

The equipment undergoing test shall be subjected to one time in both directions along each of the three orthogonal axes (total of 6 shocks). Meet MIL-STD-810F test method, method 516, procedure I.

The equipment shall be subjected to the functional test before, During and after this test to demonstrate compliance with the requirements as specified.

MECHANICAL SPECIFICATIONS:		
Parameter		Units
Material	Aluminum L.12	
Dimensions	101x56x41.4	Millimeter
Weight	500	gram typ
RF Connector Input	WR90	
RF Connector Output	SMA Female	
Finish Painted	Custom - RAL7045	

Waveguide Limiter, 9.2-10.2 GHz WR90 Package to SMA Female Connector, 12 Kilowatts Peak

Adaptor Waveguide specs

Order Examples: RADAPT-9.1-10.3-WR90-Sf-r12

Description: (Adaptor Waveguide to Circulator, 9.1-10.3GHz, WR90 package, SMA Female Connector)

Electrical Specifications		Units
Frequency	9.1-10.3	GHz
VSWR	1.25 :1	max
Mechanical Specifications		
Dimension (Length Width Height)	40 x 41.4 x 41.4	mm
Weight	100	gram
Waveguide interface	WR90	
RF Connector	SMA Female	
Operating Temp	-40 to +80	°C
Non-Operating Temp	-40 to +85	°C
Relative Humidity	95% (Non-condensing)	
Altitude(Mil-STD-810F)	10,000-30,000	feet
Vibration / Shock(Mil-STD-810F)	Airborne	
Finish Painted	Custom - RAL7045	
Weight Approx.	55	grams

To ship fitted to the limiter, and be painted to match

Documents for shipment

1. Datasheet
2. (1) year Warranty Certificate.
3. Certificate of Conformance (inc Date of Manufacture and Country of Origin).
4. Test data
 - a. Flatness Leakage : +10dBm max. Spike Leakage: +17dBm max, 0.1 erg. max.
 - b. Insertion Loss : 0.8dB max. @ -10dBm max input power
 - c. Phase Matching : The difference between any two Limiter shall be within ± 15.0 degrees
 - d. Input / Output VSWR: 1.4: 1 max @ -10dBm max input power.
 - e. 3dB Recovery Time: 3 microseconds max
 - f. High Power test: 12KW Peak Power, 4% Duty Cycle, Pulse Width: 32microseconds
5. Manufacturer Quality Assurance Certificate.
 - a. Peak Power (Fault condition): 30KW peak power, 4% Duty Cycle, 32 microsecond Pulse width min.
 - b. Peak Power (Normal condition): 12KW peak power, 4% Duty Cycle, 32 microsecond Pulse width min.