

W-Band Fixed Attenuator

WR-10/75-110GHz/20 ± 1.5dB Attenuation

Model: TLFA-20-WR10

TLFA-20-WR10 is a 20 dB fixed attenuator that is used in millimeterwave systems and operates from 75 to 110 GHz. The input and output port configuration offers an inline structure with WR-10 waveguides and UG-387/U-M antickocking flanges. Other attenuation values are available under different model numbers as TLFA-XX-WR10, where XX is the desired attenuation value.

Features:

- Full Band Coverage
- 1-35dB Available
- Good attenuation flatness
- Good Return Loss

Applications:

- Test Equipment
- RF Over Fiber
- Communication Systems
- Radar Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	75		110	GHz
Attenuation Value		20		dB
Attenuation Flatness		±1.5		dB
Return Loss		-20		dB
Power Handling			100	mW
Specification Temperature		+25		°C

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	WR-10/UG-387/U-M	
Material	Aluminum	
Finish	Gold Plated	
Size	40x20x20	mm

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	+20dBm

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TLFA-20-WR10	WR-10 Waveguide Fixed Attenuators; 75-110GHz, 20±1.5dB Attenuation	Rev.1.0