

Active Frequency Multiplier

X6/70-110GHz/18dBm Output Power

Model: TLAM-070110-0618-1.0

TLAM-070110-0618-1.0 is an active X6 frequency multiplier. The multiplier has an input frequency of 11.66 to 18.34 GHz with a typical input power of +3 dBm and an output frequency of 70 to 110 GHz with a typical output power of +18 dBm. The DC power requirement for the multiplier is +16V DC/150 mA. The input port configuration is female 1.85mm connector and output port configuration is female 1.0mm connector.

Features:

- Output Frequency: 70-110GHz
- Output Power: 18dBm Typ
- Low power consumption
- 50 Ohm Matched Input / Output

Applications:

- Synthesizers
- Local oscillators

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	70		110	GHz
Output Power		18		dBm
Input Frequency	11.66		18.34	GHz
Input Power	0	3		dBm
Multiply Factor		6		
Harmonic Suppression		-20		dBc
DC Voltage		16		V
DC Supply Current		150		mA

Mechanical Specifications:

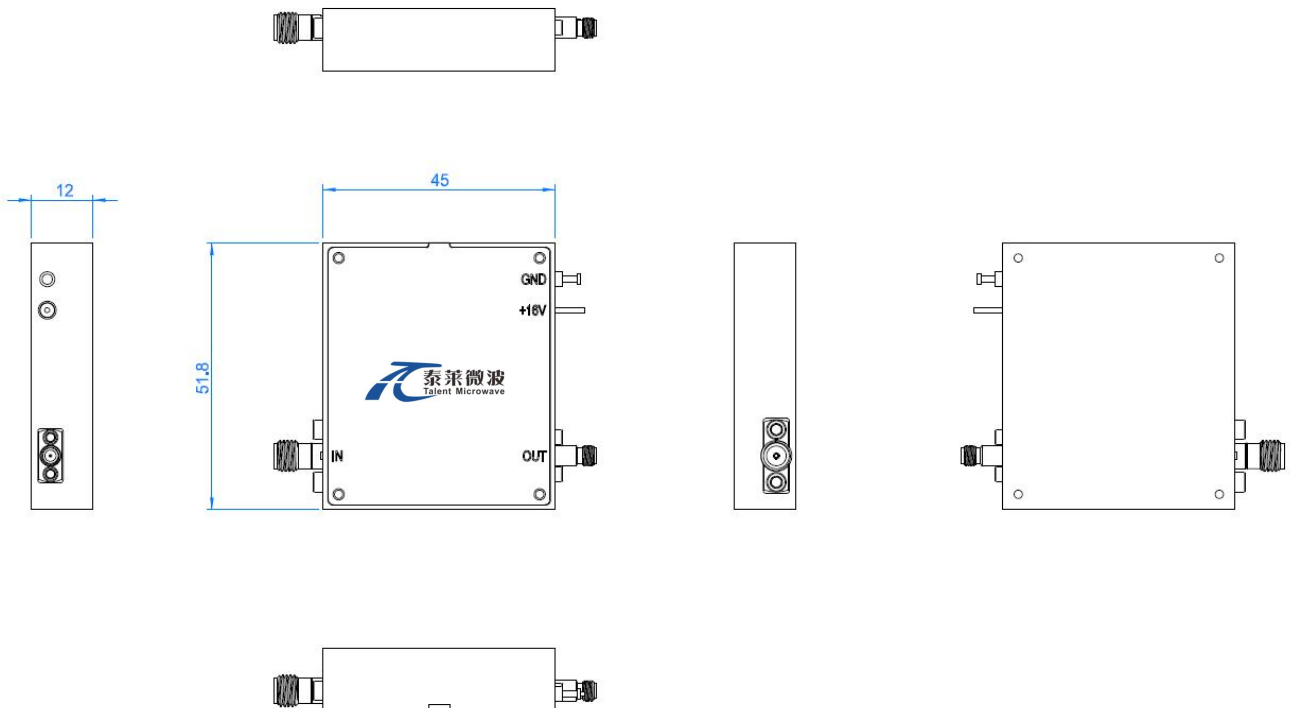
Parameter	Value	Units
Output Connector	1.0mm Female	
Input Connector	1.85mm Female	
DC Bias	Solder Pin	
Size	51.8*45*12(Without heatsink)	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+17 V
RF Input Power	+8 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

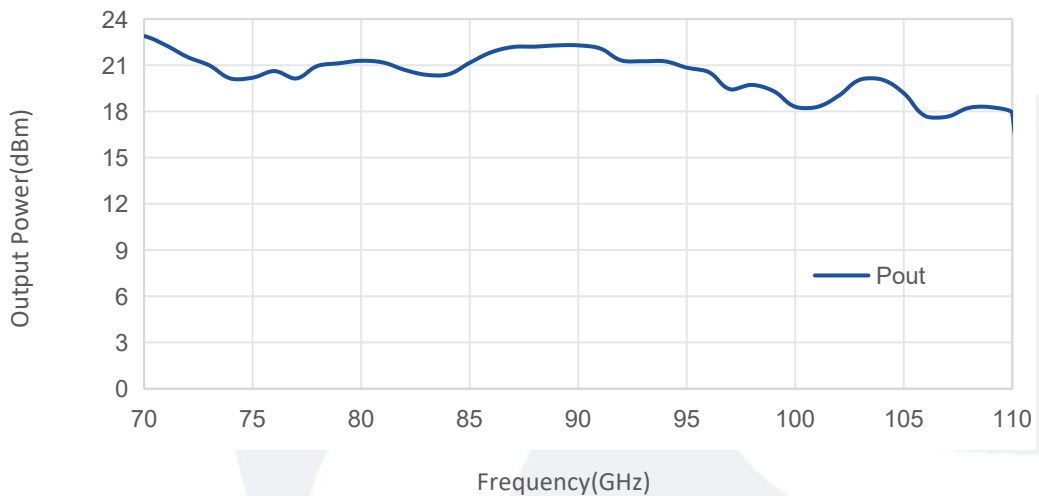
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TLAM-070110-0618-1.0	Active Multiplier,X6, 70-110GHz , +18 dBm Output Power,1.0mm Female	Rev.1.0

Typical Performance Data:

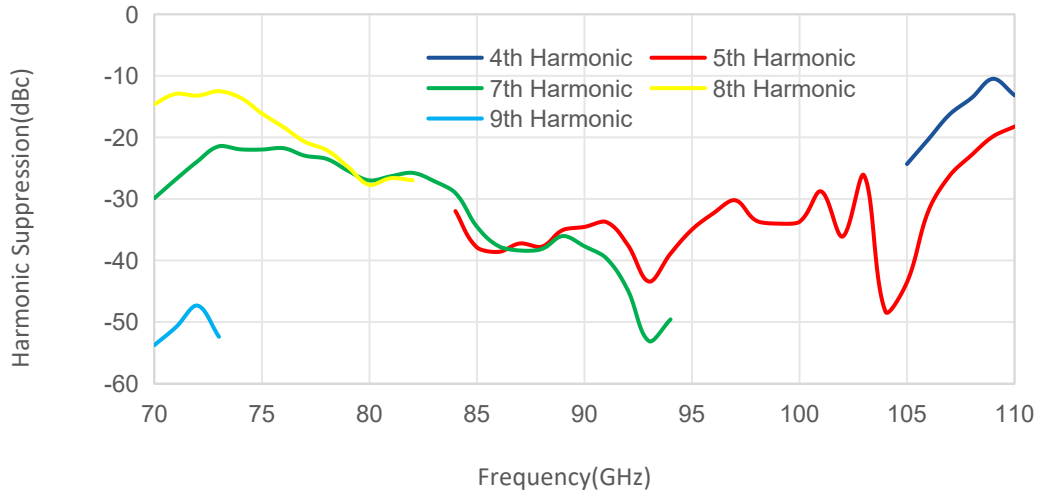
Output Power vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

Harmonic Suppression vs Frequency



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