

Active Frequency Multiplier

X2/4-16GHz/15dBm Output Power

Model: TLAM-0416-0215-S

TLAM-0416-0215-S is an active X2 frequency multiplier. The multiplier has an input frequency of 2 to 8 GHz with a typical input power of +5 dBm and an output frequency of 4 to 16 GHz with a typical output power of +15 dBm. The DC power requirement for the multiplier is +12 V DC/65 mA. The input/output port configuration is female SMA connector.

Features:

- Output Frequency: 4-16GHz
- Output Power: 15dBm Typ
- Low power consumption
- 50 Ohm Matched Input / Output

Applications:

- Synthesizers
- Local oscillators

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	4		16	GHz
Output Power		+15		dBm
Input Frequency	2		8	GHz
Input Power		5	10	dBm
Multiply Factor		2		
1st Harmonic		-18		dBc
3rd Harmonic		-20		dBc
DC Voltage	+8	+12	+15	V
DC Supply Current		65		mA

Mechanical Specifications:

Parameter	Value	Units
Output Connector	SMA Female	
Input Connector	SMA Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm

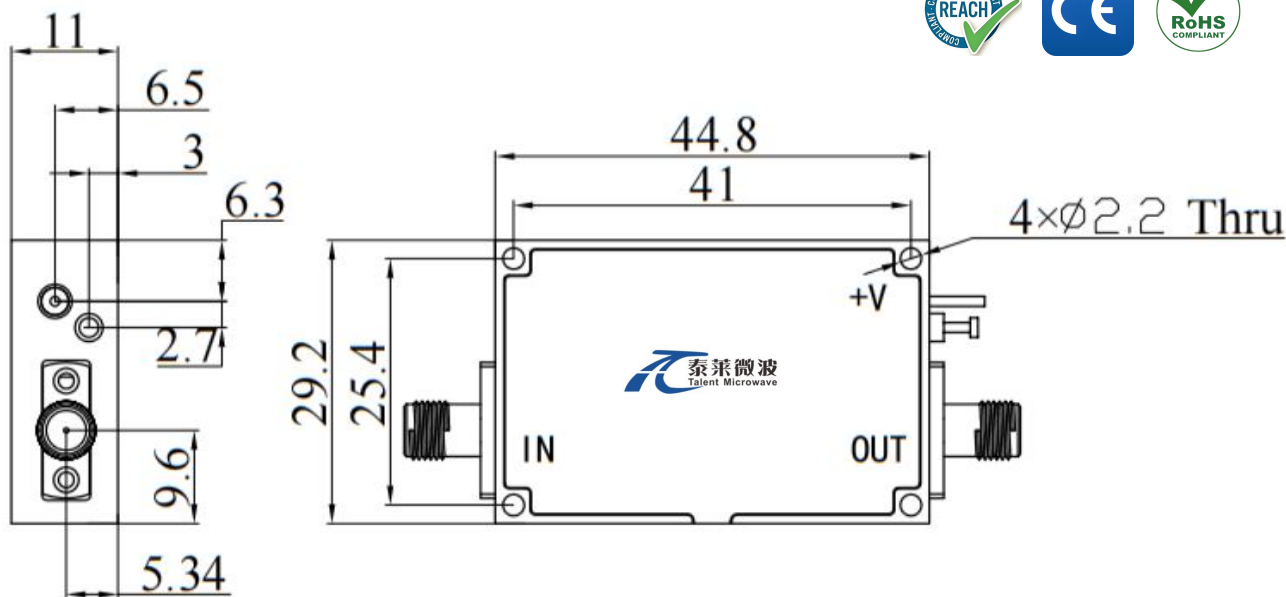
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+18 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

Regulatory Compliance:



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

Environmental Conditions:

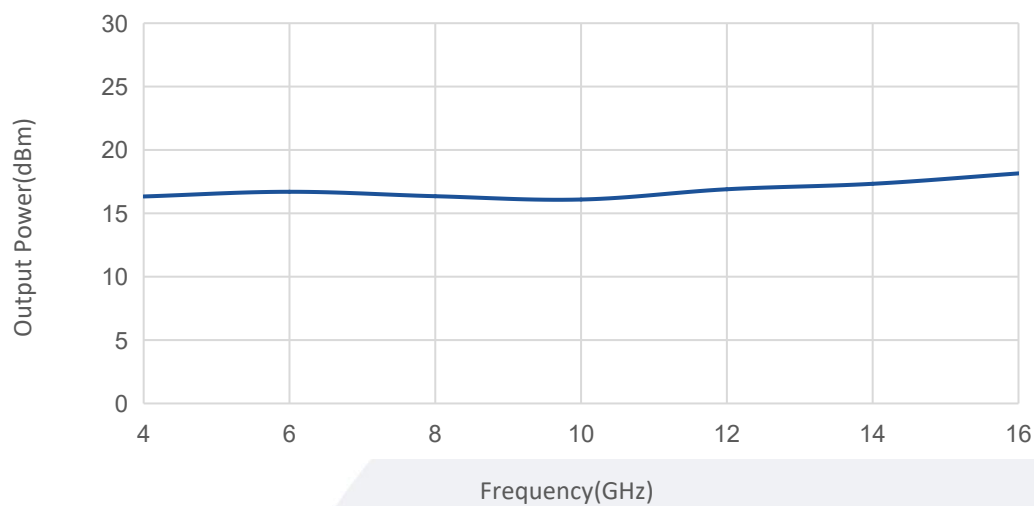
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

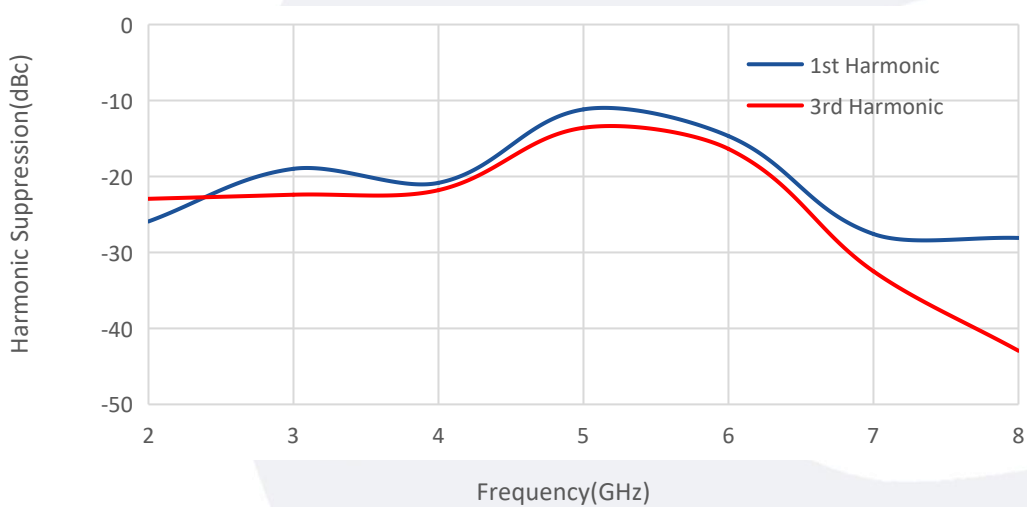
Base Number	Description	Revision
TLAM-0416-0215-S	Active Multiplier X2, 4-16 GHz ,+15 dBm Output Power,SMA Female	Rev.1.1

Typical Performance Data:

Output Power vs Frequency



Harmonic Suppression 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.