

## Active Frequency Multiplier

### X3/8-15GHz/5dBm Output Power

**Model: TLAM-0815-0305-S**

TLAM-0815-0305-S is an active X3 frequency multiplier. The multiplier has an input frequency of 2.66 to 5 GHz with a typical input power of 5 dBm and an output frequency of 8 to 15 GHz with a minimum output power of +5 dBm. The DC power requirement for the multiplier is +12V DC/60 mA. The input and output port configuration is female SMA connector.

#### Features:

- Output Frequency: 8-15GHz
- Output Power: 5dBm Min
- Low power consumption
- 50 Ohm Matched Input / Output

#### Applications:

- Synthesizers
- Local oscillators

#### Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	8		15	GHz
Output Power	5			dBm
Input Frequency	2.66		5	GHz
Input Power	0	5	10	dBm
Multiply Factor		3		
DC Voltage	8	12	15	V
DC Supply Current		60		mA

#### Mechanical Specifications:

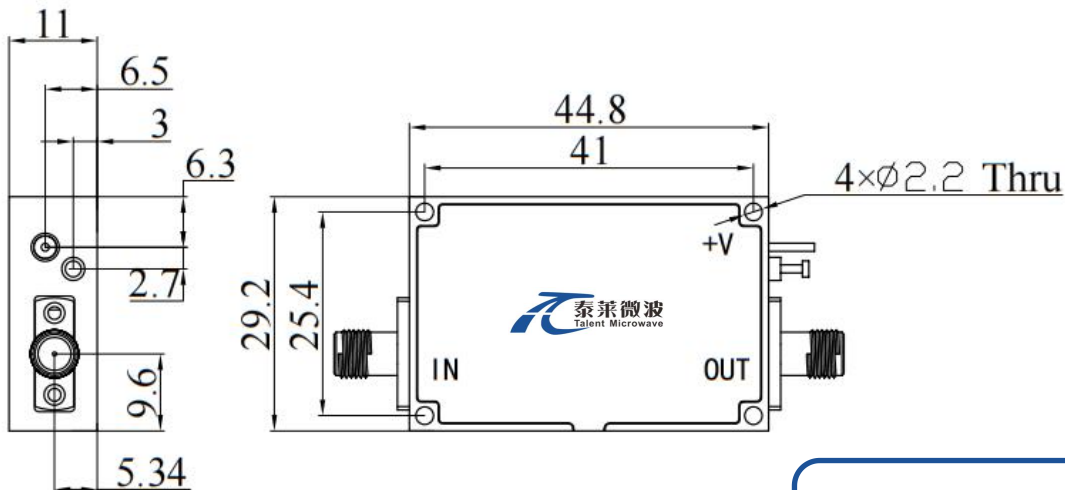
Parameter	Value	Units
Output Connector	SMA Female	
Input Connector	SMA Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm

### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

### Outline Drawing:

Unit:mm



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

### Environmental Conditions:

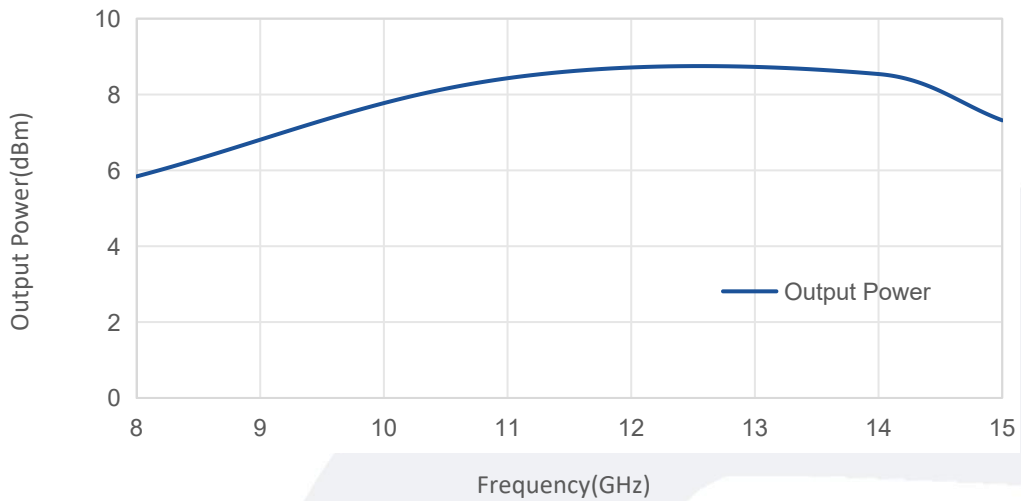
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude		10,000		feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

### Ordering Information:

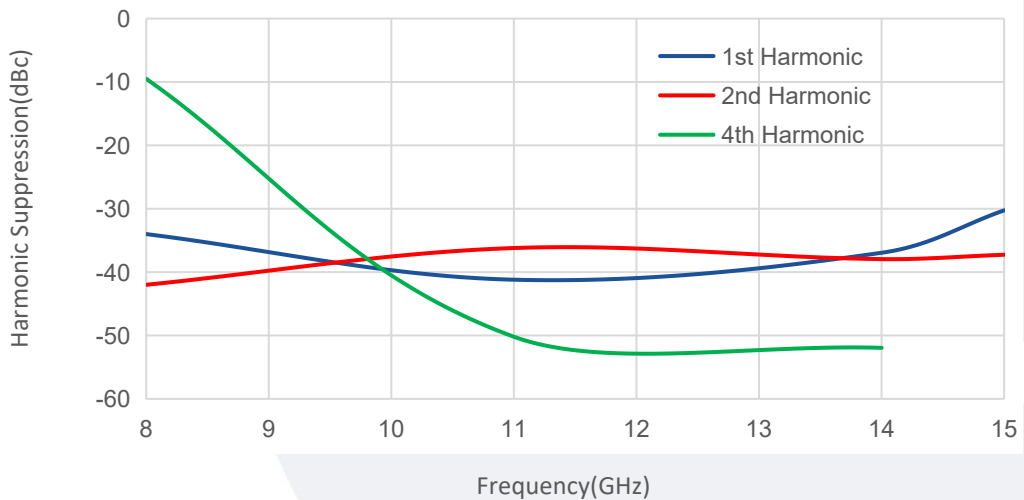
Base Number	Description	Revision
TLAM-0815-0305-S	Active Multiplier,X3, 8-15GHz , +5dBm Output Power,SMA Female	Rev.1.0

### 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.