

Active Frequency Multiplier

X4/ 18-40GHz /12dBm Output Power/SMA/2.92

Model: TLAM-1840-0412-K

TLAM-1840-0412-K is an active X4 frequency multiplier. The multiplier has an input frequency of 4.5 to 10 GHz with a typical input power of +5 dBm and an output frequency of 18 to 40 GHz with a typical output power of +15 dBm. The DC power requirement for the multiplier is +12 V DC/100 mA. The input port configuration is female SMA connector. The output port configuration is female 2.92 connector.

Features:

- Output Frequency:18-40GHz
- 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	18		40	GHz
Output Power	+12	+15		dBm
Input Frequency	4.5		10	GHz
Input Power	+3	+5	+8	dBm
Multiply Factor		4		
1st Harmonic		-30		dBc
3rd Harmonic		-25		dBc
DC Voltage	+8	+12	+15	V
DC Supply Current		100		mA

Mechanical Specifications:

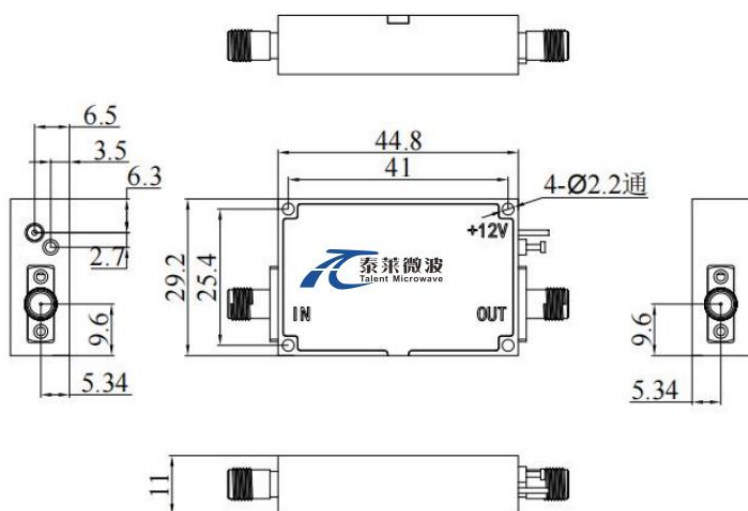
Parameter	Value	Units
Output Connector	SMA Female	
Input Connector	2.92 Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+8 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Environmental Conditions:

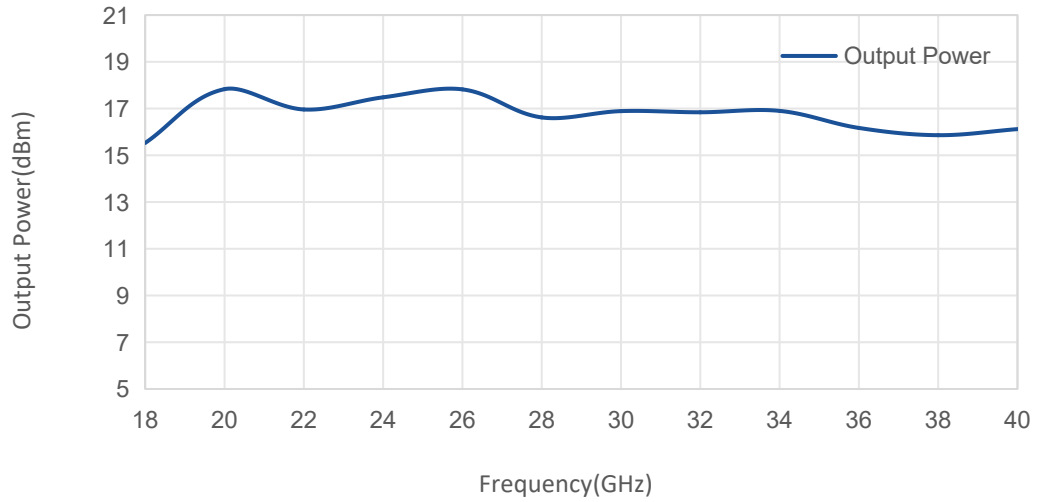
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

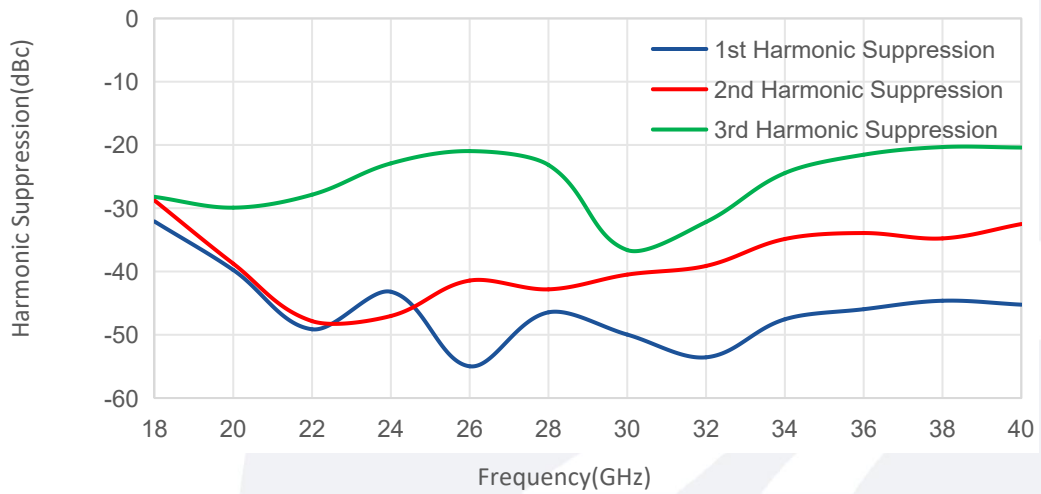
Base Number	Description	Revision
TLAM-1840-0412-K	Active Multiplier,X4, 18-40 GHz ,+15 dBm Output Power,SMA Female,2.92 Female	Rev.1.1

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.