

FMCW RF Signal source

RF Frequency:34.5-35.5GHz/1GHz, BW

Model: TLFS-FMCW-35G-1G

TLFS-FMCW-35G-1G is a FMCW RF Signal Source module. Its operating bandwidth covers 34.5 GHz to 35.5 GHz, with an output power of 0 dBm. The supported modulation waveforms include triangular wave and sawtooth wave.

Features:

- RF coverage : 34.5 to 35.5GHz
- Modulation Bandwidth : 1GHz
- Frequency modulation cycle:10ms
- Output Power: 0dBm Typ
- Great Spurious

Applications:

- Defense & federal communications
- Instrumentations

Electrical Characteristics:

Parameter		Min	Typ	Max	Units
Center Frequency			35		GHz
Modulation Bandwidth			1		GHz
Frequency Modulation Period			10		ms
Modulated Waveform		Triangular wave/Sawtooth wave			
Output Power			0		dBm
Output Power Flatness				±1.5	dB
Spurious@single frequency point			-50		dBc
Harmonics			-45		dBc
Dynamic range @continuous frequency sweeping		50			dB
Trigger Mode		Internal/External			
Phase Noise	@100Hz		-85		dBc/Hz
	@1KHz		-95		
	@10KHz		-100		
	@100KHz		-105		
	@1MHz		-110		
Power Supply Voltage			12		V DC
Control Mode			RS232		

Mechanical Specifications:

Parameter	Value	Units
RF Output Connector	2.92mm Female	
DC Supply Connector	J30J-9Pin	
Size	TBD	mm
Weight	TBD	Kg

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+24 V
ESD sensitivity (HBm)	Class 0, passed 150V

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-20		+60	°C
Non-operating Temperature	-40		+70	°C
Relative humidity		95		%
Altitude	3,000			meters
Shock / Vibration(MIL-STD-810F)	10G rms (15 degree 2KHz) endurance			
Shock(non operating)	50G for 12msc half sin wave			

Ordering Information:

Base Number	Description	Revision
TLFS-FMCW-35G-1G	FMCW RF Signal Source RF:34.5-35.5G Bandwidth:1GHz	Rev.1.0