

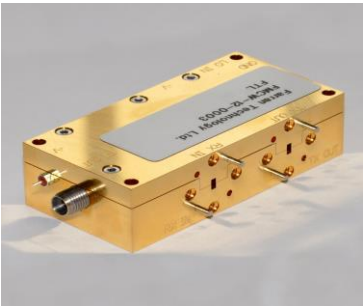


FMCW-12-0006
Radar Front End

Datasheet

Description

Farran's 77 GHz FMCW Radar front end is based on a GaAs MMIC chipset offering wide bandwidth in a small outline package. The transmit signal is derived from an input VCO signal, which also acts as the LO for the receive mixer. The resulting IF is conditioned for gain and filtering as required.



Features

- Very compact, simple design
- Lightweight and low power consumption
- High available bandwidth
- FMCW homodyne architecture
- Customised solutions possible
- Bi-Static antenna configuration

Applications

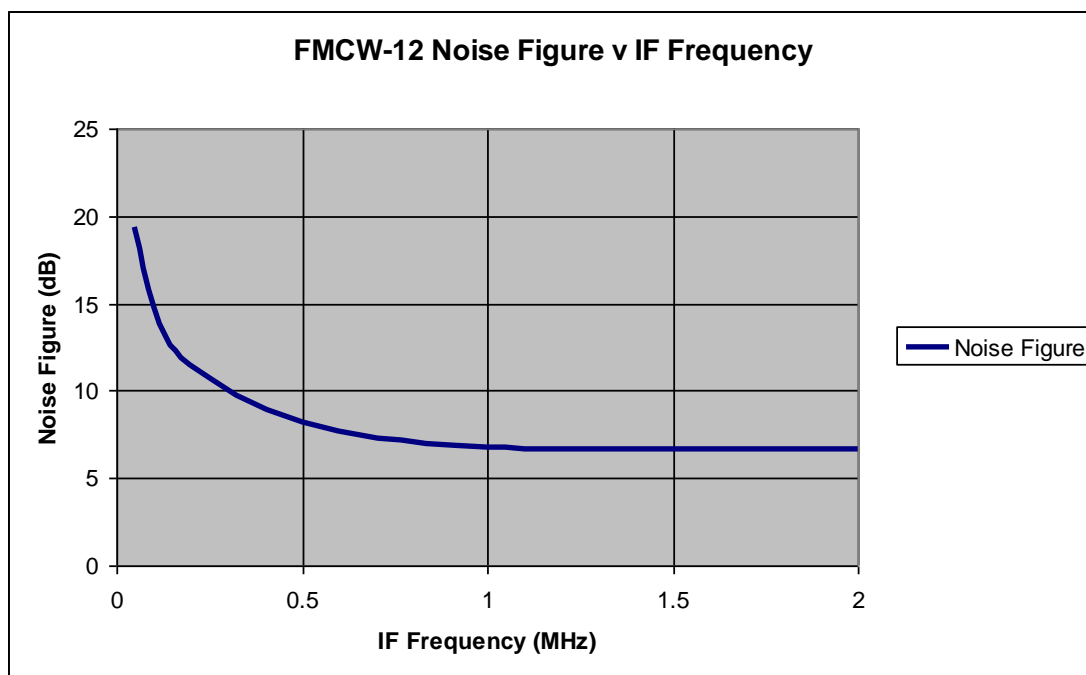
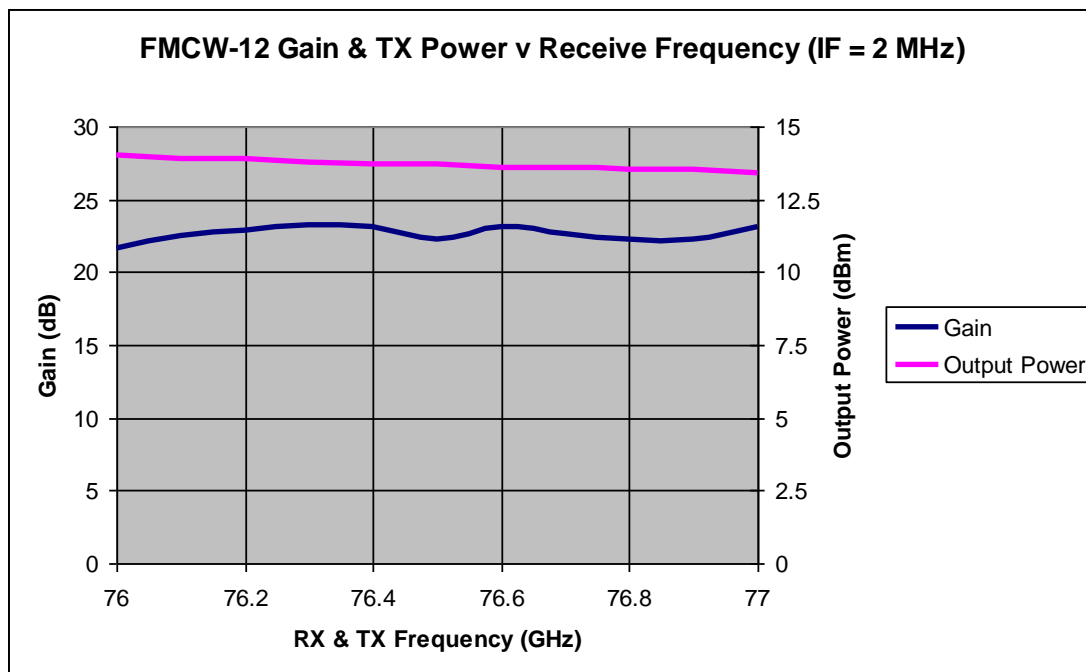
- Aircraft collision avoidance
- Critical area surveillance
- Vehicular collision avoidance
- Runway incursion detection
- Traffic management
- FOD – Foreign Object Detection

Specification	Unit	Min	Typ	Max
Centre Frequency	GHz		76.5	
Bandwidth	GHz		1	
Receiver Gain	dB		20	
Receiver Noise Figure @ 2MHz IF	dB			10
IF Output Frequency	MHz	0.05		10
LO Input Power	dBm		+10	
RF Connections	-	WR-12 UG-387/U		
LO Connector	-	SMA (F)		
IF Connector	-	SMA (F)		
Power Requirements	-	+5V @ 400mA typical -5V @ 40mA typical		
Dimensions (L x W x H)	-	67 mm x 28 mm x 19 mm		



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Notes:

Farran Technology reserves the right to change, without notice, the characteristic data and other specifications applied to this product. The product may be subject to Irish export restrictions

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