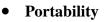


FMCW Radar Front-end FMCW-10/94/200/10 at 94 GHz

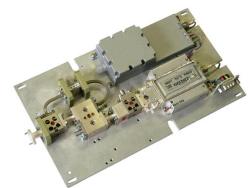
- High accuracy
- On-line measurement
- High directivity with small antennas

Applications

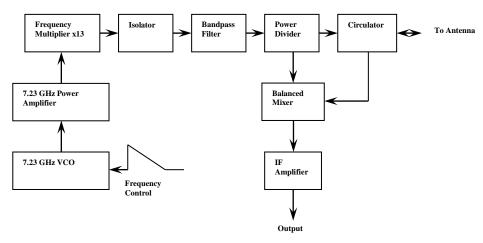
- Ground control in airports and other facilities
- Avoid collision systems
- Precise distance measurement in dusty and/or humid atmosphere
- Level sensing for any materials and liquids in huge tanks with foam/vapour
- Robotic sensors



- Environmental safety
- Equipped with antennas by customer's choice



Block Diagram of FMCW-10/94 front end module.



Specifications

• Centre Frequency:	94 GHz
• Radar front-end wattage	10mW
• Frequency Stability:	5*10(-6) 1°/C
• Sweep Range:	200 MHz (min)
Minimal Sweeping Time:	100 μSec
• Linearity:	0.7% (max)
• Tuning Sensitivity:	>50 MHz/V
• Output RF Power:	+10 dBm (min)
Reverse Isolation:	17 dB (min)
• IF Frequency:	4 kHz to 2 MHz
• RF to IF Gain:	32 dB (typ)
Waveguide/Flange:	WR-10 / UG-387/U-M
• IF and Frequency Control Connector:	SMA (f)
• DC Power:	+12V/300mA, -12V/50mA +27V/200mA/(+500mA heater)
• Mass:	1200 gram (max)
Operating Temperature:	-40 to +70 deg



Outline Drawing.

