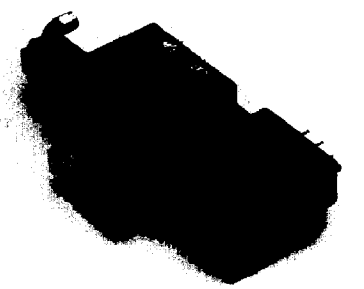
WAVEGUIDE DUPLEXING INTEGRATED PACKAGE

12.5 TO 17.5GHz

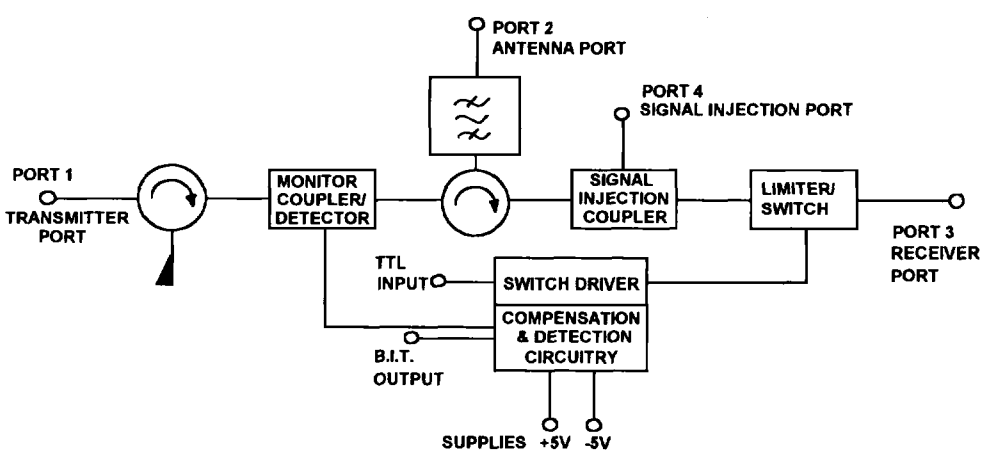
FEATURES



- Low Tx and Rx Losses
- Optimised VSWR
- Broadband Tx and Rx Protection
- Lightweight Compact Assembly
- All Solid State Reliability
- Fast Switching

DESCRIPTION

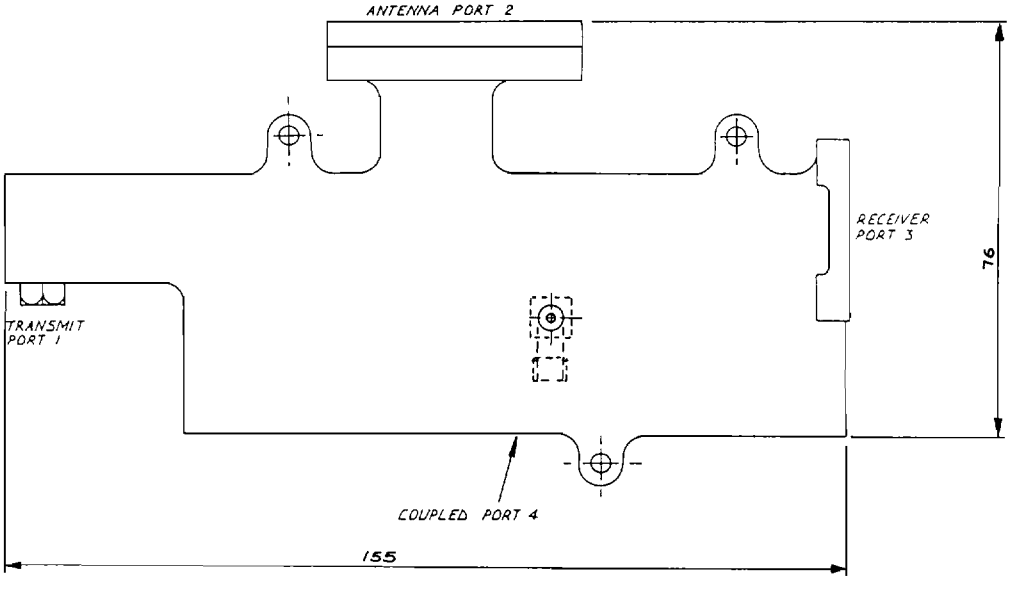
The ML 10700-30 is a lightweight assembly designed to interface between the transmitter, antenna and receiver of a man portable radar system, and incorporates protection to both the transmitter and receiver from specific in and out of band signals. The assembly consists of an isolator, transmitter power monitor, circulator, receiver signal injection port, solid state limiter and band pass filter. Integral circuitry is used to switch the limiter during transmission and to provide a B.I.T. signal indicating correct transmitter function.



SPECIFICATION

Frequency	: 14 to 17GHz	Isolation Port 2 to Port 1	: 20dB
Bandwidth	: 3%	Limiter Switching Speed	: 200ns
Transmitter Power	: 5W C.W.	VSWR Port 1	: 1.3:1
Interference Peak Power	: 100W	VSWR Port 2	: 1.4:1
Interference Pulse Duration	: 10µs	VSWR Port 3	: 1.5:1
Flat Leakage Receiver Port	: 17dBm	VSWR Port 4	: 2:1
Spike Leakage Receiver Port	: 27dBm	Filter Rejection fo - 1.5GHz	: >25dB
Insertion Loss Port 1 to 2	: 1.25dB	fo +3.5GHz	: >15dB
Insertion Loss Port 2 to 3	: 1.45dB	Power Supplies	: ±5V
Insertion Loss Port 4 to 3	: 25dB	Switch Logic Input	: TTL
Isolation Port 1 to Port 3	: 58dB	B.I.T. Logic Output	: TTL

OUTLINE DRAWING



Port 1	SMA Male	Switch Control Line	)
Port 2	Waveguide Flange	Transmitter BIT	) Solder Pins
Port 3	Waveguide Flange	Power Supplies	)
Port 4	SMA Female	Ground Terminal	)

All specifications are typical and subject to change without notice