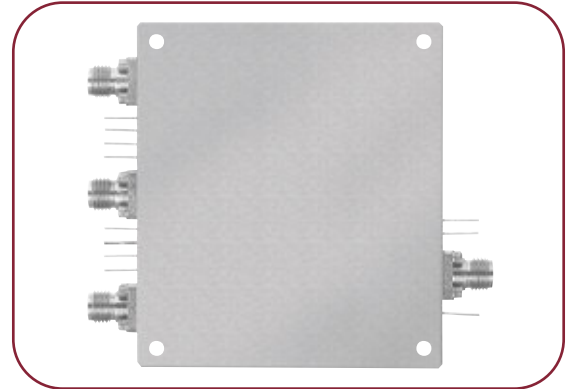


C-BAND RECEIVER

MODEL: DC-50305091-12-0

FEATURES

- High selectivity
- 20 dB image rejection
- Low LO re-radiation



ELECTRICAL SPECIFICATIONS

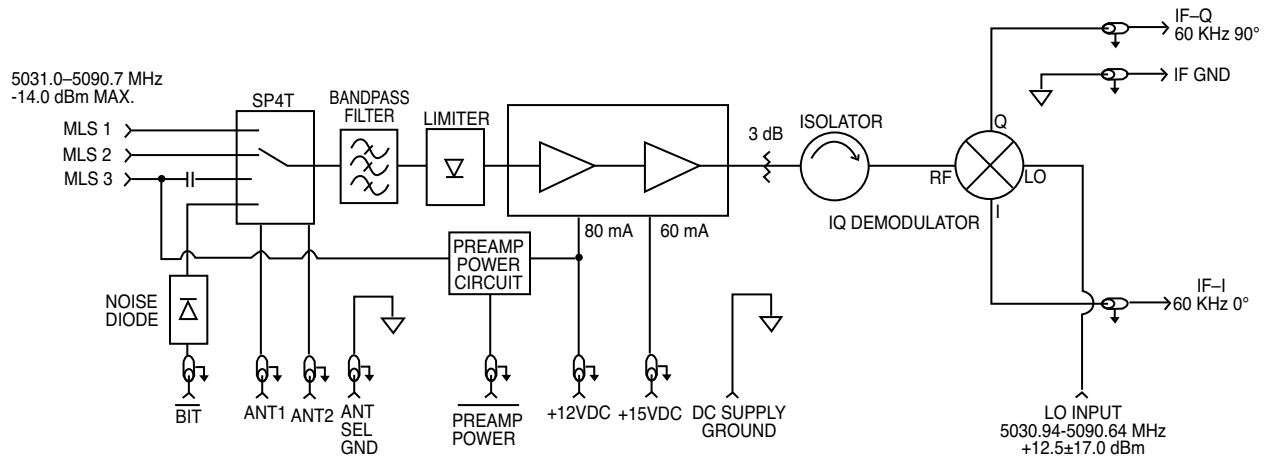
PARAMETERS	UNITS	MIN.	TYP.	MAX.
Input frequency range	MHz	5031		5090.7
Output frequency range	kHz		60	
LO frequency range	MHz	5030.94		5090.64
Gain	dB, max.		16	
Gain	dB, min.		8	
Input power (1 dB compression)	dBm	-14		
Input IP3	dBm	-4		
Selectivity				
50 kHz to 969 MHz	dBc			-70
969 to 3820 MHz	dBc			-75
3820 to 4500 MHz	dBc			-50
4500 to 4925 MHz	dBc			-5
4990 MHz	dBc			-5
5132 MHz	dBc			-20
5185 to 5350 MHz	dBc			-40
5350 to 6285 MHz	dBc			-80
6285 to 6365 MHz	dBc			-75
10200 to 12400 MHz	dBc			-70
Noise figure	dB			5.8
Input VSWR	Ratio			2:1
LO port VSWR	Ratio			2:1
LO re-radiation at antenna ports @ +15 dBm LO input	dBm			-78
Antenna port-to-port isolation	dB			30
Noise bit output	dBm		-105 ±3 dB	
IF I & Q unbalance	dB			0.5
Image rejection				
@ 20 kHz	dB	15		
@ 30–100 kHz	dB	20		
IF carrier to noise ratio (-106 dBm RF In, 100 kHz BW IF)	dB		-12.5	
TTL rise and fall time	ns	10		
Settling time	μs	75		
Time to readable signal	μs	175		
Antenna switch time	μs	250		
Readable signal line bias	%			10
Switching transient peak output	Volts	70% of peak IF voltage		
DC input @ +5V	mA			60
DC input @ +12V	mA			120
DC output	VDC	+11 @ 40 mA		

DC50305091-12-0

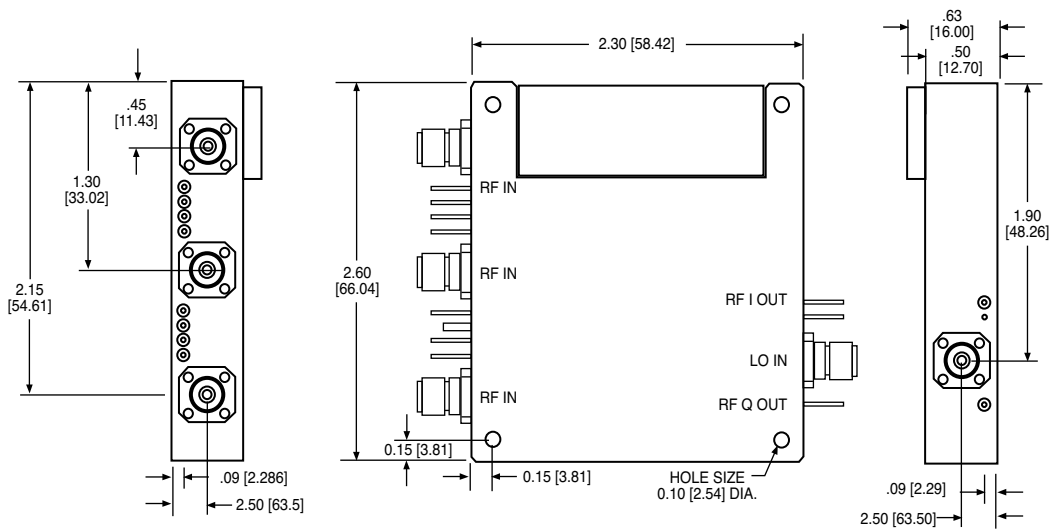
ENVIRONMENTAL CONDITIONS

Operating temperature.....	0 to 70°C
Storage temperature.....	-30 to +85°C
Humidity.....	95% noncondensing
Vibration.....	12 g's rms, 20-2000 Hz per MIL-STD-810B Method 514, Procedure 5

FUNCTIONAL BLOCK DIAGRAM



OUTLINE DRAWING



GENERAL NOTES:

- Dimensions shown in brackets [] are in millimeters.
- Tolerance as follows: .xx = ±0.01 [.xx = ±0.25], .xxx = ±0.005 [.xxx = ±0.13]

