



GeosSat
Microwave

- Frequency Range 17.2 - 20.2 GHz
- L.O stability depends on ext. ref.
- Power supply +15 to +24V DC
- Power connector Feed thru and/or output connector



Block Downconverter Ka-Band 3LO Ext. Ref. 1720X (BDC)

Model: GBDKA1720E

Specifications

Parameter	Specification	
Band 1	Input Freq.	17.20 - 18.20
	Output Freq.	950 - 1950
	L.O Freq.	16.25 @13 VDC
Band 2	Input Freq.	18.20 - 19.20
	Output Freq.	950 - 1950
	L.O Freq.	17.25 @13 VDC & 22KHz
Band 3	Input Freq.	19.20 - 20.20
	Output Freq.	950 - 1950
	L.O Freq.	18.25 @18 VDC
Noise figure	18 dB max	
Conversion gain at -40 to +60°C	30 dB typ. (25dB min. 35dB max.)	
Gain flatness	4 dBp-p max.	
Gain flatness at -40 to +60°C	5 dBp-p max.	
Gain ripple at per 27MHz, -30 to +60°C	1 dBp-p max.	
L.O stability at -40 to +60°C	depends on ext. ref.	
Image rejection	40 dBc min. @LO 16.25 GHz	
	20 dBc min. @LO 17.25 GHz	
	0 dBc min. @LO 18.25 GHz	
Phase noise	-70 dBc/Hz (@1KHz)	
	-80 dBc/Hz (@10KHz)	
	-95 dBc/Hz (@100KHz)	
Output P1dB	+5 dBm min.	
Ext. ref. input freq. & power	10 MHz, -5 to +5 dBm	
Ext. ref. input port	Output connector	
Input VSWR	3.0: 1 max	
Output VSWR	2.2: 1 max	

Parameter	Specification
Input connector	SMA-type female
Output connector	SMA, F, N-Type female (option)
Power supply	+15 to +24V DC
Power supply connector	Feed thru and/or output connector
Required current	350 mA max.
Operating temperature	-40 to +60°C
Waterproof	IP 67
Dimension (exclude connector)	110 x 63 x 39mm
Weight	400 g

Mechanical Diagram (Unit: inch (mm))

