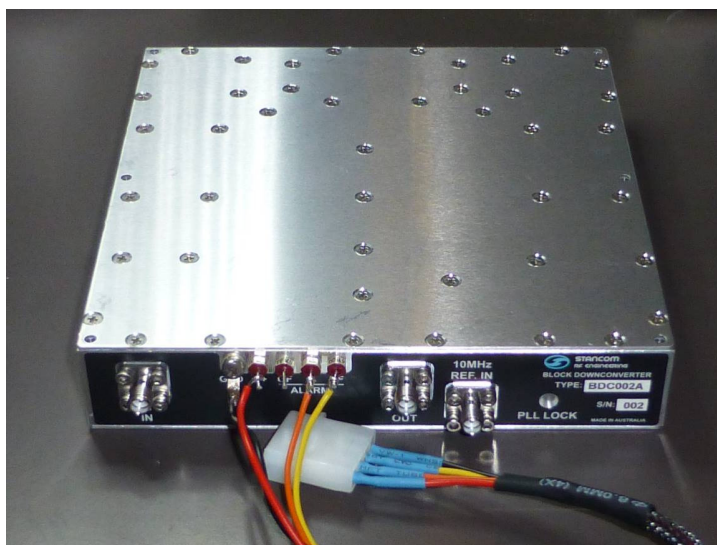


The BDC002A is a high performance 'S' Band block down convector designed to allow 'S' Band 2.2-2.6GHz to be down converted to 1.2-1.6GHz. It features a phase locked loop LO with low Phase noise, exceptional linearity and excellent passband flatness. Overall gain is >20dB. An out of lock alarm is provided as relay contacts.



Specification:

<u>Parameter</u>	<u>Limits</u>
Electrical:	
Input Frequency Range	2.2 – 2.6GHz
Output Frequency	1.2 – 1.6GHz
Output Spectrum	Non – inverted
Local oscillator Frequency	1.0 GHz, Phase locked to a 10MHz external Reference
LO Phase Noise	100Hz -85dBc/Hz 1kHz -100dBc/Hz 10kHz -100dBc/Hz 100kHz -105dBc/Hz 1MHz -130dBc/Hz
Spurious, Signal Related	< -60dBc in IF Band. (2 x 0dBm test tones 1MHz separation, @ o/p)
Spurious Non Signal Related	< -80dBm in IF Band
LO Leakage @ 1.0GHz	< -50dBm
LO Leakage @ 3.0Ghz	< -90dBm
LO Leakage @ 4.0GHz	< -90dBm
Gain Minimum	>20dB, Typ 25dB
Gain Variation Full Band	+/-1dB
Gain Variation Per 40MHz	+/-0.25dB.
Gain Stability Per Week, Constant Temp	+/-0.5dB
Gain Stability Vs Temp	+/-1dB.
Power Output P1dB	>+16dBm, Typ. +17.5dBm
TOIP (Output)	> +30dBm
Noise Figure @23DegC	<12dB
VSWR Input (50 Ohms)	Max 1.50:1, (Return Loss < -14dB)
VSWR Input (50 Ohms)	Max 1.50:1, (Return Loss < -14dB)
Image Rejection	> 50dB.
Ref input Level @10MHz	-5dm to +5dBm
Fault Alarm PLL out of lock	Form-C Contact (100V/50mA)
Voltage	12 – 16 VDC.
Current Quiescent	< 500mA

Mechanical:

RF Connectors. RF/IF/EXT REF	3 x SMA type Female
DC/Alarms	RFI Feedthrough solder pin
Case Size. (Masthead)	153 x 153 x 40mm (Excluding Connectors)
Weight:	<1kg
Material	Aluminium Main housing with aluminium cover

Environmental:

Temperature:	-10 to +60°C
Weatherproofing	Indoor use only.

