

MDS-MMDS Transceiver



520004_1

Part number

520004_1

Downconverter specifications: (Rx)

RF Input Frequency	2500 - 2696 MHz
IF Output Frequency	222 - 418 MHz
Gain	32 ± 6 dB (-30°C to +60°C)
Gain Flatness	3.5 dB typ., 4.5 dB Max. (-30°C to +60°C)
Noise Figure	4.0 dB typ.; 5.5 dB Max at upper end of band
IMD*	-50 dBc Max.
Output 3rd Order Intercept	24 dBm Min.
Image Rejection (PCS Band inclusive)	80 dB Min. (60 dB is pre-LNA)
WCS Rejection	70 dB Min. (35 dB is pre-LNA)
Out-of-Band Rejection	40 dB at 2750 MHz Min. 40 dB at 2450 MHz Min.
IF Rejection	-85 dBc Max.
In-Band Spurious	-80 dBm Max.

Upconverter specifications: (Tx)

IF Input Frequency	14.375 - 26.375 MHz
RF Output Frequency	2150 - 2162 MHz
Gain	22 ± 5 dB (-30°C to +60°C)
Gain Flatness	3 dB Max. (-30°C to +60°C)
Output 1-dB Compression Point	+25 dBm Min.
Output Transmit Noise	-116 dBm/Hz Max.
Output Spurious/Harmonics (+22 dBm Tx Out)	-60 dBc (Both in-band and out of Band)
Switch Threshold IF Input Level (QPSK CH.)	-50 dBm Max.
Switching Speed (On/Off)	15 usec. Max.

General specifications:

LO Frequency	2278 MHz ± 10 KHz (-30°C to +60°C)
Phase Noise	-65 dBc/Hz @ 100 Hz -85 dBc/Hz @ 1 KHz -93 dBc/Hz @ 10 KHz -98 dBc/Hz @ 100 KHz
IF Connector (Rx out / Tx In)	F-Type, 75 Ohm
RF Connector (Rx In / Tx out)	N-Type, 50 Ohm
Tx IF Return Loss	Tx In: -10 dB
Tx/Rx RF Return Loss	-7 dB Max.
DC Supply	16 to 24 Volts DC @ 550 mA
Operating Temperature	-30°C to +60°C
Finish	Chem. Film, MIL-C-5541, Class 3 and Power Coat, Bright white
Physical Dimensions:	
Size	6.7x6.7x2.7 in. (170x170x70 mm.)
Weight	36 oz. (1000 gm.)

*Two tone test @ -1 dBm each at the output.
All Specifications are at 25°C unless otherwise specified.