

APPLICATION		REVISIONS			
TITLE	USED ON	REV	DESCRIPTION	DATE	APPROVED
NEXT ASSY SIZE	520010-1	C	Add LO Frequency/ECO#39187	2/12/01	S. ALEMAN

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES: FRACTIONS DECIMALS ANGLES ±1/32 .XX ±.01 ±0°30' .XXX ± .005	NEXT ASSY	MODEL	C+A			
		520010-1				
MATERIAL:	DRAWN: E. SCHARA	DATE: 10/23/00	SPEC SHEET, MMDS-MMDS TRANSCEIVER, HI UPSTREAM			
	CHECK: E. EBDANE	DATE: 11/10/00				
	ENGR: S. NIMER	DATE: 10/24/00				
	OTHER:	DATE:				
FINISH:			A	CAGE CODE	DWG NO. M520010-1	REV. C
				6T925	SHEET 1 OF 2	
DO NOT SCALE DRAWING	ELEC. FILE: M520010-1C.doc		SCALE	WEIGHT		

C+A

MMDS-MMDS TRANSCEIVER (High Upstream)

PART NUMBER: 520010-1

Downconverter Specifications: (Rx)

RF Input Frequency	2500 - 2602 MHz
IF Output Frequency	222 – 324 MHz
Local Oscillator Stability	± 50 KHz over temp, ± 75 KHz over 5 years
Gain	32 ± 5 dB (-40° to +60° C)
Gain Flatness (over temperature)	3.5 dB typical; 5 dB Max. (full band)
Noise Figure	4 dB Typ.; 5 dB Max. (25° C)
Output 3rd Order Intercept (2 MHz spacing)	24 dBm
PCS Rejection	95 dB (60 dB pre-LNA)
WCS Rejection	80 dB (50 dB pre-LNA)
Out-of-Band Rejection	50 dB at 2750 MHz
.....	40 dB at 2450 MHz

Upconverter Specifications: (Tx)

IF Input Frequency.....	21.75 – 63.75 MHz
RF Output Frequency.....	2644 – 2686 MHz
Local Oscillator Frequency	2468 MHz; ±15 KHz over temp
.....	(-30°C to +60°C)
Gain Set	22 ± 2 dB (25° C)
Gain Variation	±3 dB (-30° to +60° C)
Output IP3 (500 KHz spacing)	+35 dBm (25° C)
P1dB	+24 dBm (25° C)
Output Transmit Noise (Tx ON)	-115 dBm/Hz
Output Spurious (at +22 dBm Tx output)	-50 dBc in-band; -60 dBc out-of-band
Output Power Blanking:	
Turn OFF Threshold Level.....	-52 ± 6 dBm @ IF Input (-30° to +60° C)
Turn OFF Time	4 msec.

General Specifications:

Phase Noise (both Rx and Tx)	-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/Rx IF Return Loss	-7 dB Max.
DC Supply.....	16 to 24 Volts DC @ 750 mA

Mechanical Specifications:

Dimensions	8.85 x 8.85 x 2.85 in.
Weight	5.6 lbs. (with mount)
Environmental:	
Moisture	Environmentally sealed
Operating Temperature	-40°C to + 60°C

Above specifications subject to change without notice.

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SPEC FORM: M520010-1

REV: C

DATE: 2/01