

C+A

MMDS-MMDS INTEGRATED PLANAR TRANSCEIVER

PART NUMBER

520010-2A

Downconverter Specifications: (Rx)

RF Input Frequency	2500 - 2602 MHz
IF Output Frequency	222 – 324 MHz
Local Oscillator Stability	2278 MHz; ± 75 KHz over temp
Gain	28 ± 5 dB (-30° to $+60^{\circ}$ C)
Gain Flatness	3.5 dB Typical; 4.5 dB Max.
Noise Figure	4 dB Typical.; 5.5 dB Max. (25° C)
Output 3rd Order Intercept	24 dBm
PCS Rejection	80 dB (60 dB pre-LNA)
WCS Rejection	80 dB (50 dB pre-LNA)
Out-of-Band Rejection	40 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 $+60^{\circ}$ C)
Gain Set	22 ± 3 dB (25° C)
Gain Variation	± 3 dB (-30° to $+60^{\circ}$ C)
Output IP3	+35 dBm (25° C)
P1dB	+24 dBm (25° C)
Output Transmit Noise (Tx ON)	-110 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 $\pm$ 6 dBm @ IF Input

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
Tx IF Return Loss	-7 dB Max.
DC Supply.....	16 to 24 Volts DC @ 750 mA

Above specifications subject to change without notice.

World Headquarters: 460 Calle San Pablo, Camarillo, CA, USA 93012 Tel: 805/987-9000 Fax: 805/987-8359

Latin America Sales: California Amplifier do Brazil, Tel: 55/11 3849 8273 FAX: 55/11 3849 2807

Europe, Middle East & Africa Sales: Cal Amp sarl Paris, Tel: 33/1 49 19 89 20 Fax: 33/1 48 64 52 55

SPEC FORM: M520010-2A

REV: B

DATE: 10/01

C+A

MMDS-MMDS INTEGRATED PLANAR TRANSCEIVER

PART NUMBER

520010-2A

Antenna Specifications:

Frequency Bandwidth..... 2500 - 2686 MHz
Gain..... 17 dBi $\pm$ 1 dB
3 dB Beam width..... 18.5° $\pm$ 1.5°
1st Side Lobe (relative to main beam) 17 dB Max., 20 dB Typ.
Cross Polarization..... -30 dB Max.
Pattern Interference Rejection (>60°) 20 dB Min.

Mechanical Specifications:

Dimensions 13.5 x 13.5 x 3.5 in.
Weight 7 lbs. (with mount)
Environmental:
Moisture Environmentally sealed
Operating Temperature -30°C to + 60°C
Wind..... Operational to 50 mph

Above specifications subject to change without notice.

World Headquarters: 460 Calle San Pablo, Camarillo, CA, USA 93012 Tel: 805/987-9000 Fax: 805/987-8359

Latin America Sales: California Amplifier do Brazil, Tel: 55/11 3849 8273 FAX: 55/11 3849 2807

Europe, Middle East & Africa Sales: Cal Amp sarl Paris, Tel: 33/1 49 19 89 20 Fax: 33/1 48 64 52 55

SPEC FORM: M520010-2A

REV: B

DATE: 10/01