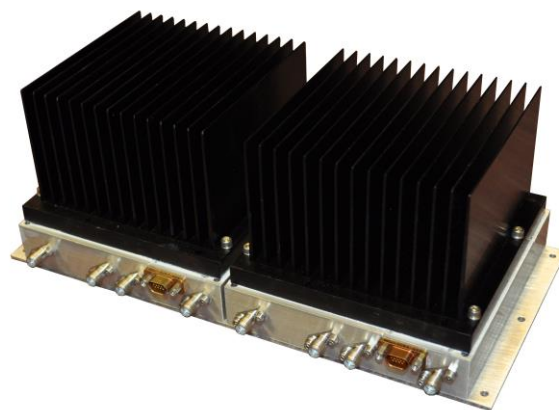


DESCRIPTION

This class AB LDMOS is a QUAD module designed for MIMO radios in military and commercial applications. It is capable of supporting any signal type and modulation format, including but not limited to 3-4G telecom, WLAN, OFDM, DVB, and CW/AM/FM. The latest device technologies and design methods are employed to offer high power density and efficiency for MIMO applications with four channels.



FEATURES

Optional Heatsink
Temp. Monitor Output

Manual or Automatic Tx/Rx Switching Available

Specifications subject to change without notice. Typical performance at +28VDC at 25°C in a 50Ω system

Tx SPECIFICATIONS				
PARAMETER	MIN	TYP.	MAX	UNIT
Operating Frequency	2200		2500	MHz
PSat Power Output Per Channel		+44.0		dBm
Gain Per Channel		25.0		dB
Gain Flatness		1.5		± dB
Input Return Loss	-16	-18		dB
Operating Voltage	+27	+28	+30	VDC
Current Draw Per Channel		700.0	2400.0	mA
Tx / Rx Switching Time		1.0	2.0	μs

Rx SPECIFICATIONS				
PARAMETER	MIN	TYP.	MAX	UNIT
P1dB Power Output Per Channel		+5.0		dBm
Gain Per Channel		11.0		dB
Gain Flatness		1.0		dB
Noise Figure Per Channel		2.5		dB
OIP3		+15.0		dBm
Input Return Loss		-10		dB
Current Draw Per Channel		50.0		mA

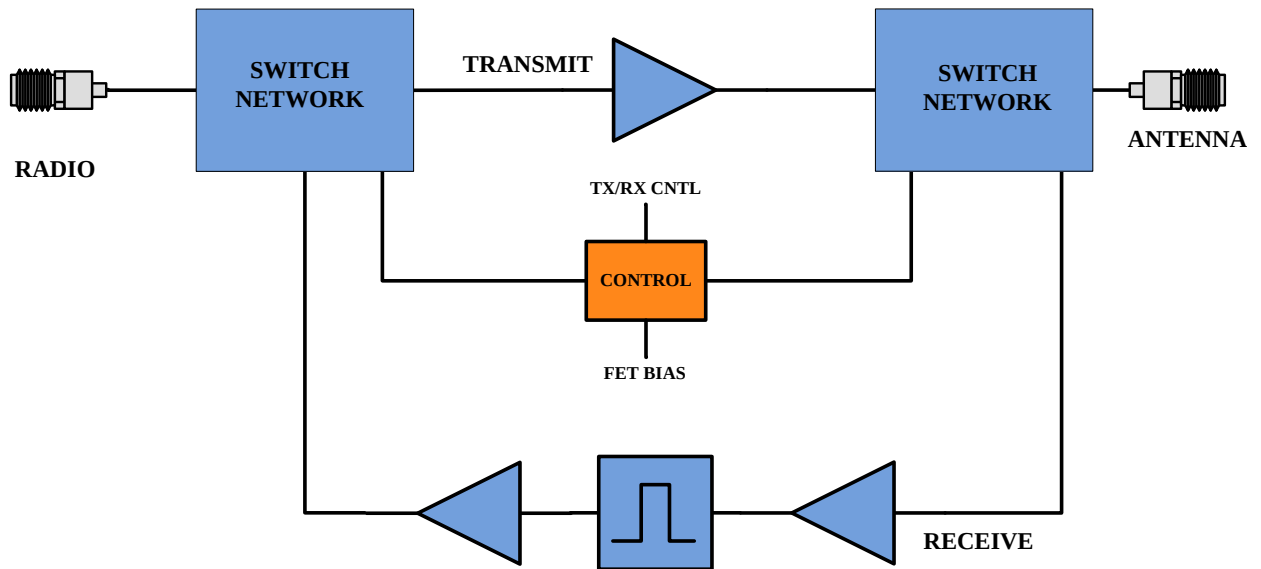
MECHANICAL		
PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	4.23 x 9 x 3.36	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	9 Pin Micro-D	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting		--
Weight	36	oz.
Weight With Heatsink	72	oz.

ENVIRONMENTAL / PROTECTIONS			
PARAMETER	MIN	MAX	UNIT
Operating Temp. (Housing Temp.)	-40	+85	°C
Storage Temp Range	-60	+100	°C
Humidity Range	0-100		%
Altitude	0-30,000		ft.
Shock / Vibration	MIL-STD-810 and equivalents		--
Max RF Input	+27		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	+90		°C

DC / CONTROL PINS		
PIN LABEL	NAME	DESCRIPTION
1	+VDC	Supply Voltage - Range Specified in Datasheet
2	+VDC	Supply Voltage - Range Specified in Datasheet
3	NC	No Connection
4	NC	No Connection
5	TEMP	Analog Temperature Sensor Output
6	GND	Ground
7	GND	Ground
8	NC	No Connection
9	TX/RX	3.3V TTL. High = TX, Low (or No Connection) = RX

DATA RATE VS. OUTPUT POWER	
OFDM MODULATION	POut (W)
64QAM OFDM per Channel	6.31
16QAM OFDM per Channel	11.22
QPSK per Channel	12.59
BPSK per Channel	19.95

See our [application note](#) that describes how this table was calculated and provides notes on in-system performance



A

B

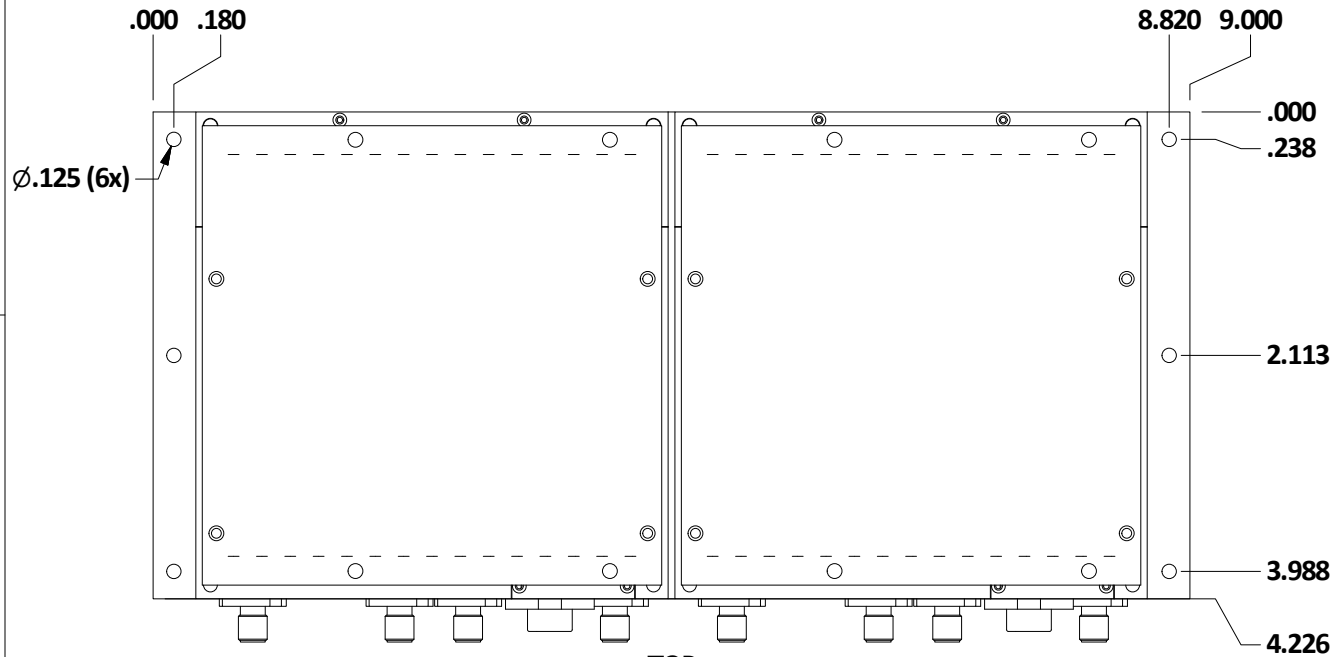
C

D

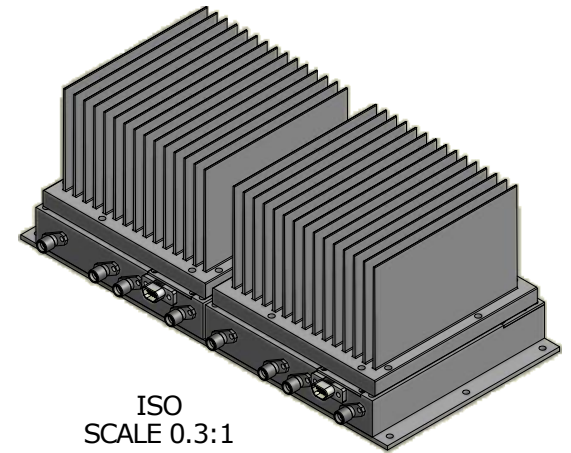
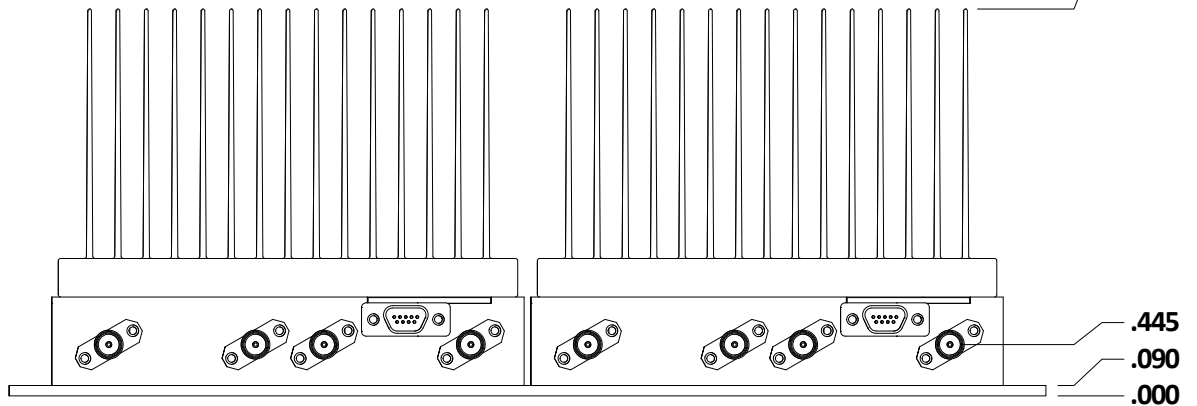
E

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
0	INITIAL RELEASE	1/3/15	DH



TOP
SCALE 0.6:1



ISO
SCALE 0.3:1

DRAWN	Dean	1/2/2015
DESIGNED	Dean	1/2/2015
CHECKED		
ENG. APPROVED		
MFG. APPROVED		

DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE		
DECIMALS	FRACTIONS	ANGLES
.XX ±.01	± 1/32	± 2°
.XXX ±.005		



180 TICES LANE
BUILDING A, SUITE 107
EAST BRUNSWICK, NJ 08816
855-558-1001

SIZE	DWG NO	REV
A	Housing Outline 141	
SCALE: NONE	CAGE CODE 67DZ3	SHEET 1 OF 1

A

B

C

D

E