

DESCRIPTION

This class AB LDMOS module is designed for both 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, efficiency, and linearity in a small, lightweight package.



FEATURES

Manual or Automatic Tx/Rx Switching Available Optional Heatsink
Over / Under / Reverse Voltage Protection

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	2400		2500	MHz
PSat Power Output		+43.0		dBm
Gain	25.0	26.0		dB
Gain Flatness		0.2	0.5	± dB
Input Return Loss	-12	-16		dB
Operating Voltage	+27	+28	+30	VDC
Current Draw			2.4	A
Tx / Rx Switching Time		1.0	2.0	uS

Rx SPECIFICATIONS				
PARAMETER	MIN	TYP.	MAX	UNIT
P1dB Power Output		+5.0		dBm
Gain	10.0	11.0		dB
Gain Flatness		0.5	1.3	dB
Noise Figure		2.5	3.0	dB
OIP3		+15.0		dBm
Input Return Loss	-12	-11		dB
Current Draw		50.0	70.0	mA

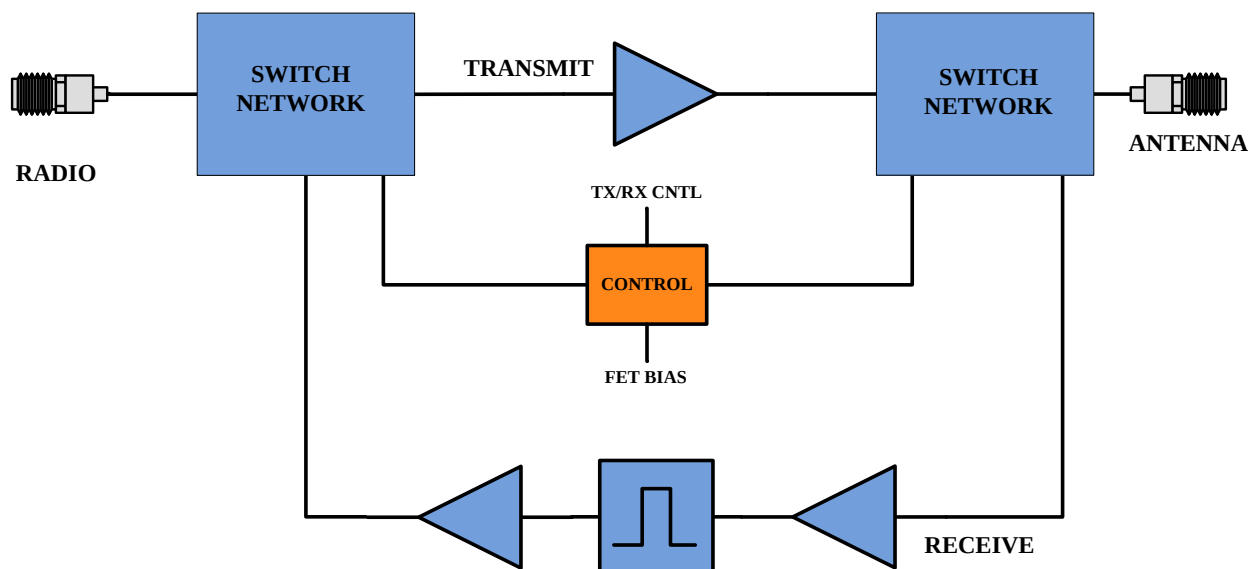
MECHANICAL		
PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	3.33 x 2.69 x 1	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	Circular Locking	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Thru Holes	--
Weight	6	oz.
Weight With Heatsink	16	oz.

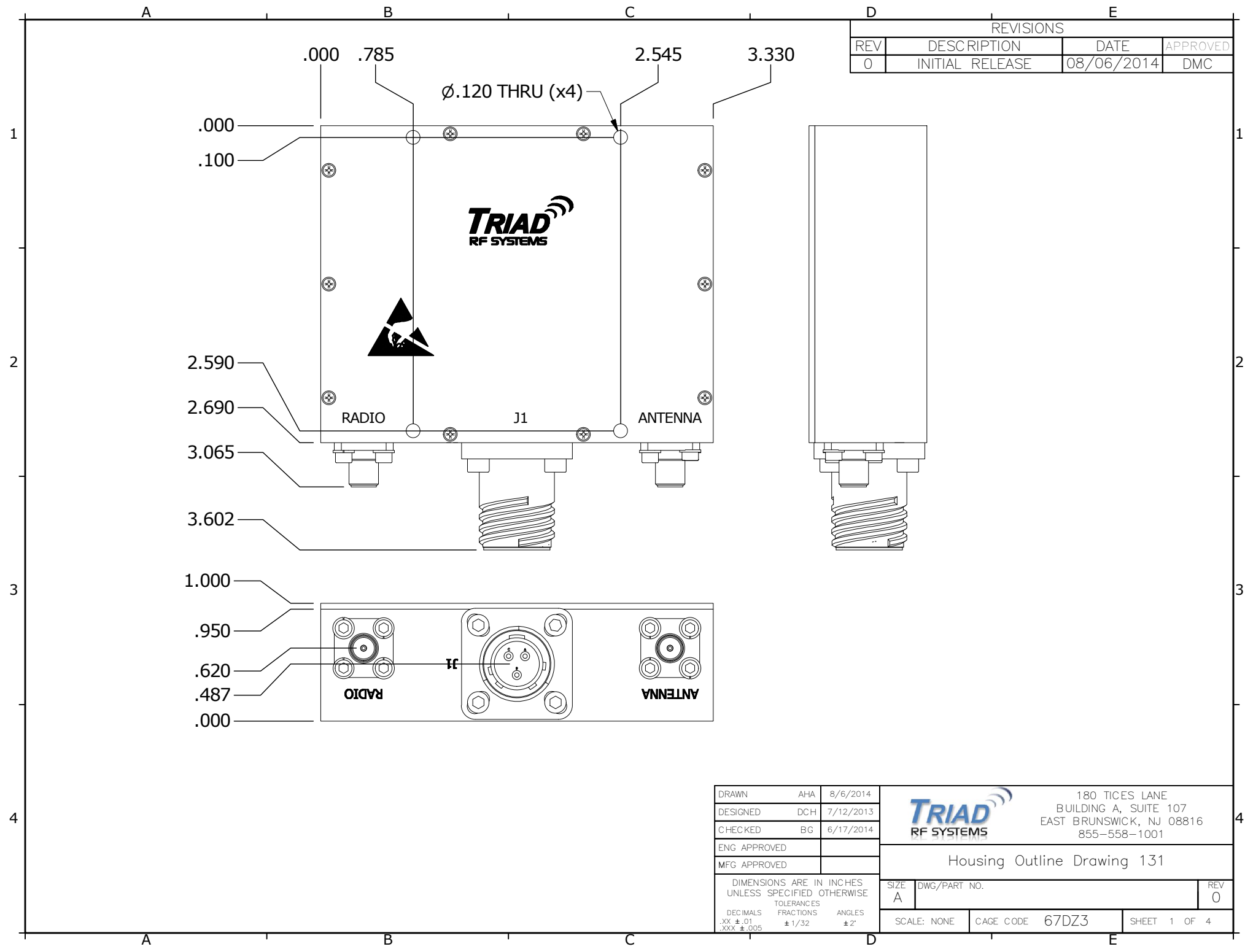
ENVIRONMENTAL / PROTECTIONS			
PARAMETER	MIN	MAX	UNIT
Operating Temp. (Housing Temp.)	-40	+85	°C
Storage Temp Range	-60	+100	°C
Humidity Range	0-100		%
Altitude	0-30,000		ft.
Shock / Vibration	MIL-STD-810 and equivalents		--
Max RF Input	+22		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	+90		°C

DC / CONTROL PINS		
PIN LABEL	NAME	DESCRIPTION
1	GND	Ground
2	Tx/Rx	Tx / Rx Switching (+5V = Tx Amp Active / 0V = Rx Amp Active)
3	+VDC	Supply Voltage - Range Specified in Datasheet

DATA RATE VS. OUTPUT POWER	
OFDM MODULATION	P _{OUT} (W)
64QAM OFDM	5.01
16QAM OFDM	8.91
QPSK	10.0
BPSK	15.85

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





REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
0	INITIAL RELEASE	08/06/2014	DMC

DRAWN	AHA	8/6/2014
DESIGNED	DCH	7/12/2013
CHECKED	BG	6/17/2014
ENG. APPROVED		
MFG. APPROVED		

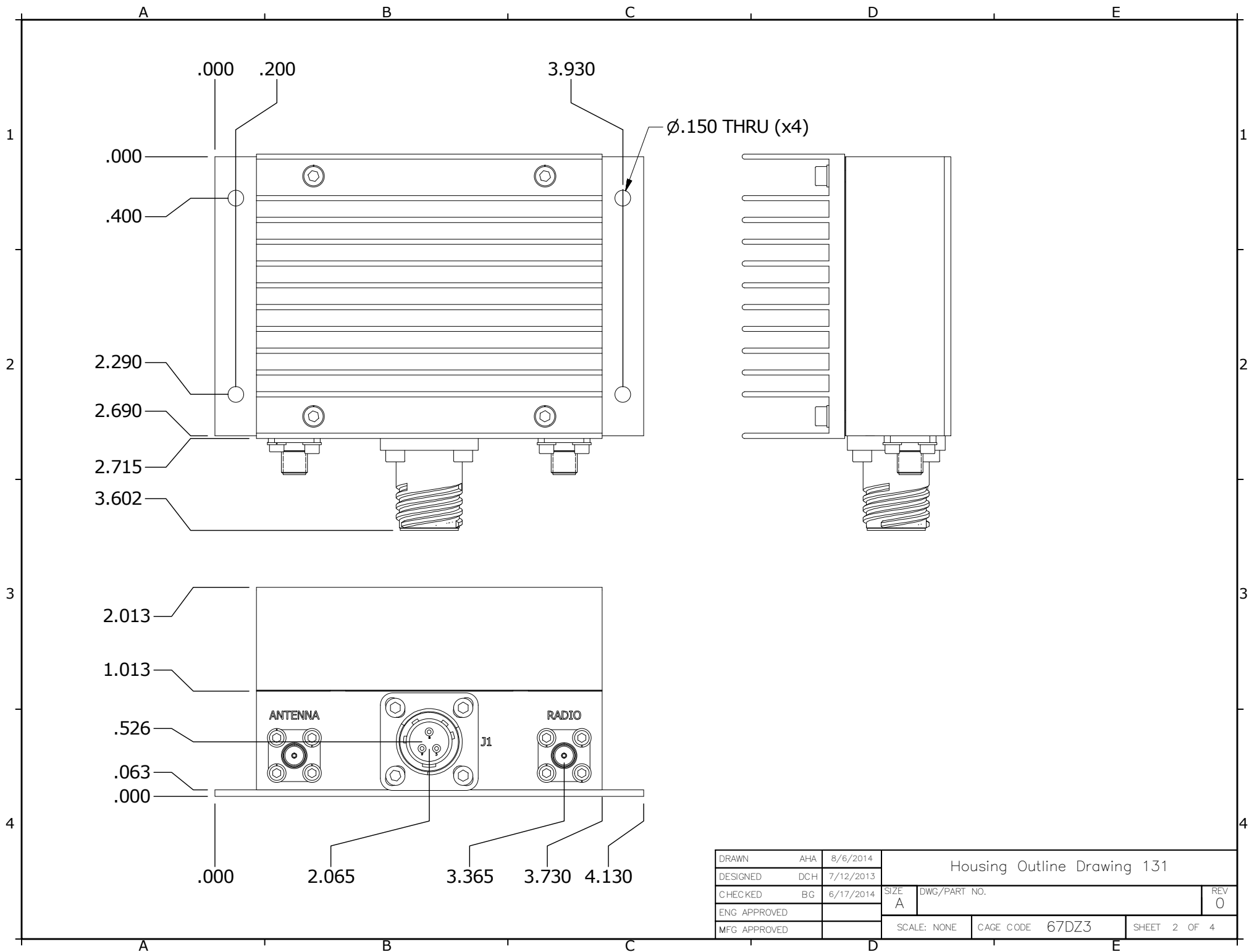
DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE		
TOLERANCES		
DECIMALS	FRACTIONS	ANGLES
.XX ±.01	± 1/32	± 2°
.XXX ±.005		



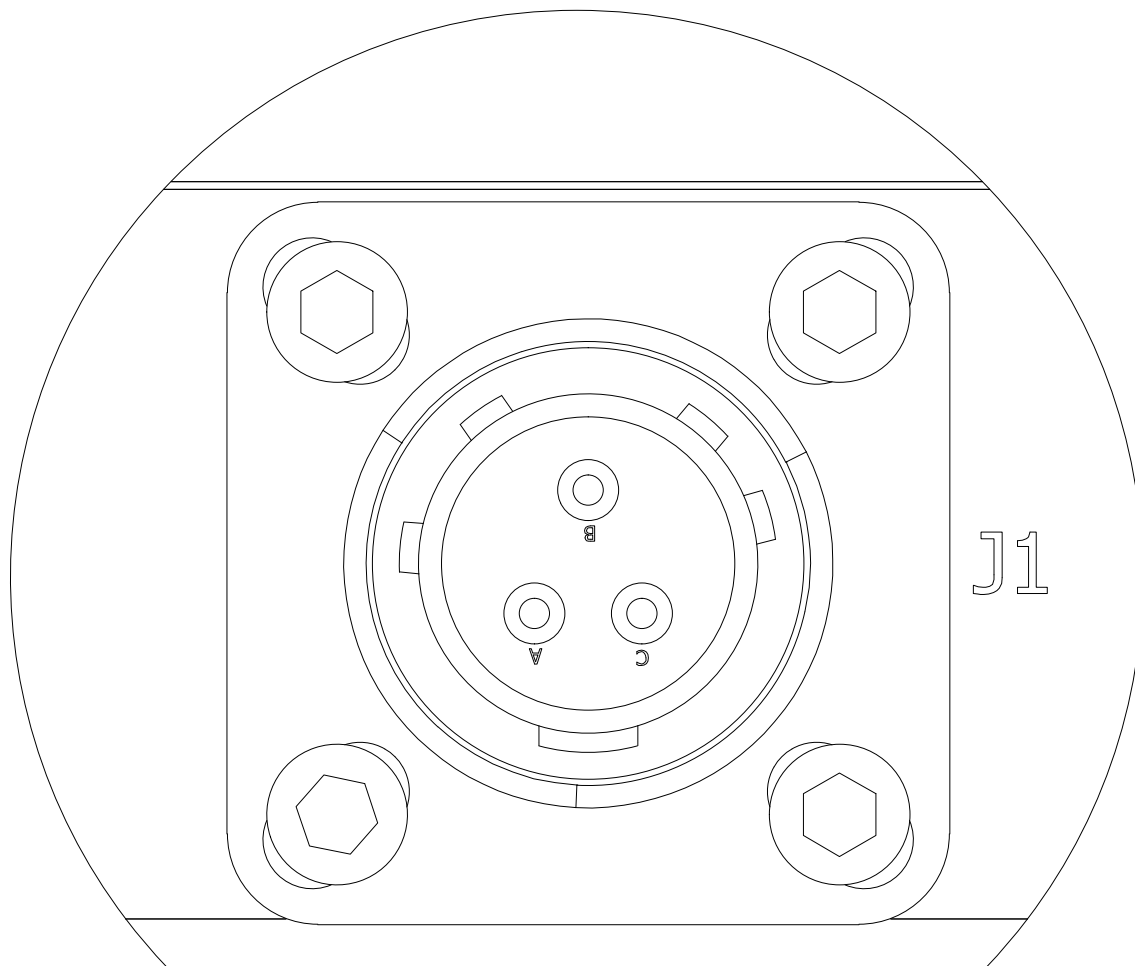
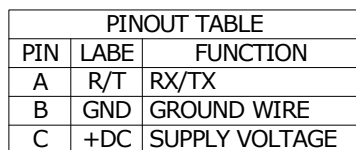
180 TICES LANE
BUILDING A, SUITE 107
EAST BRUNSWICK, NJ 08816
855-558-1001

Housing Outline Drawing 131

SIZE A	DWG/PART NO.	REV 0
SCALE: NONE	CAGE CODE 67DZ3	SHEET 1 OF 4



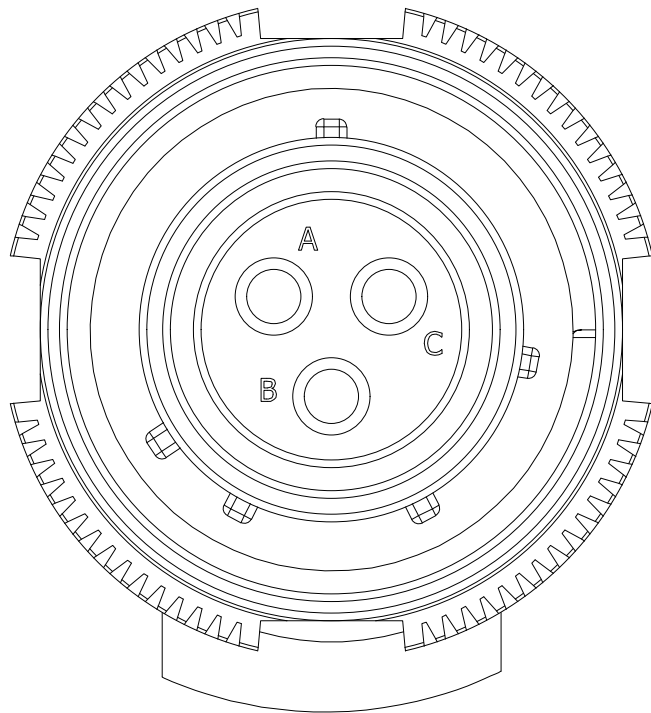
DRAWN	AHA	8/6/2014	Housing Outline Drawing 131		
DESIGNED	DCH	7/12/2013			
CHECKED	BG	6/17/2014	SIZE A	DWG/PART NO.	REV 0
ENG. APPROVED					
MFG. APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 2 OF 4



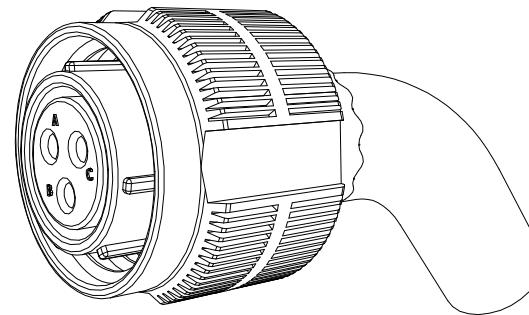
NOTES:

1. VIEW FACING CONNECTOR INTERFACE (AMP SIDE)
2. P/N OF CONNECTOR ON AMPLIFIER:
TE Connectivity Deutsch ACT Series Type 90 A-98 Size 20

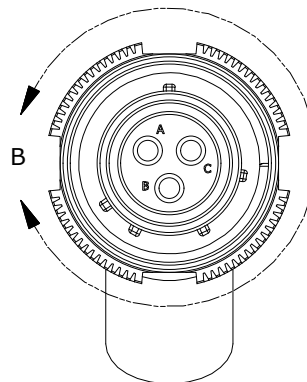
DRAWN	AHA	8/6/2014	Housing Outline Drawing 131				
DESIGNED	DCH	7/12/2013					
CHECKED	BG	6/17/2014	SIZE A	DWG./PART NO.			REV 0
ENG. APPROVED			SCALE: NONE CAGE CODE 67DZ3			SHEET 3 OF 4	
MFG. APPROVED							



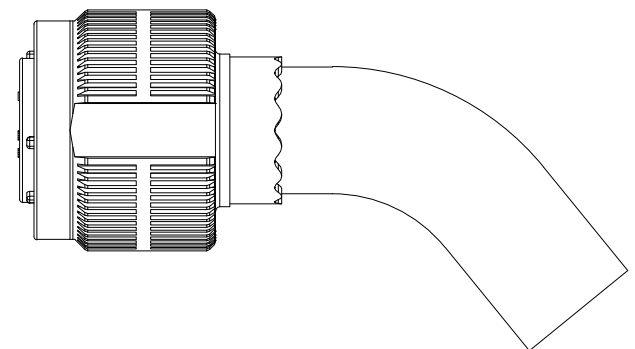
DETAIL B



MATE CABLE



C14061201



NOTES:

1. P/N OF MATING CONNECTOR REQUIRED:
TE Connectivity Deutsch ACT Series Type 96 A-98 Size 20
2. TRIAD CABLE P/N: C14061701
3. WIRE DIAMETER: 24 AWG

DRAWN	AHA	8/6/2014	Housing Outline Drawing 131		
DESIGNED	---	10/14/2013			
CHECKED	BG	6/17/2014	SIZE A	DWG/PART NO.	REV 0
ENG. APPROVED					
MFG. APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 4 OF 4