

TA1217

30-2700 MHz 8 W POWER AMPLIFIER

DESCRIPTION

This class AB GaN 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

High Speed On/Off Control
Over-Temperature Protection

Temp. Monitor Output
Optional Heatsink

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

TX SPECIFICATIONS				
PARAMETER	MIN	TYP.	MAX	UNIT
Operating Frequency	30		2700	MHz
PSat Power Output		+39.0		dBm
Gain	26.0	36.0		dB
Gain Flatness		3.0		± dB
Input Return Loss	-10	-14		dB
Operating Voltage	+12		+30	VDC
Current Draw		1.4		A
Tx / Rx Switching Time		1.0	2.0	uS

MECHANICAL		
PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	3.25 x 2.42 x 0.54	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	Rectangular Locking	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Through Holes	--
Weight	4	oz.
Weight With Heatsink	8	oz.

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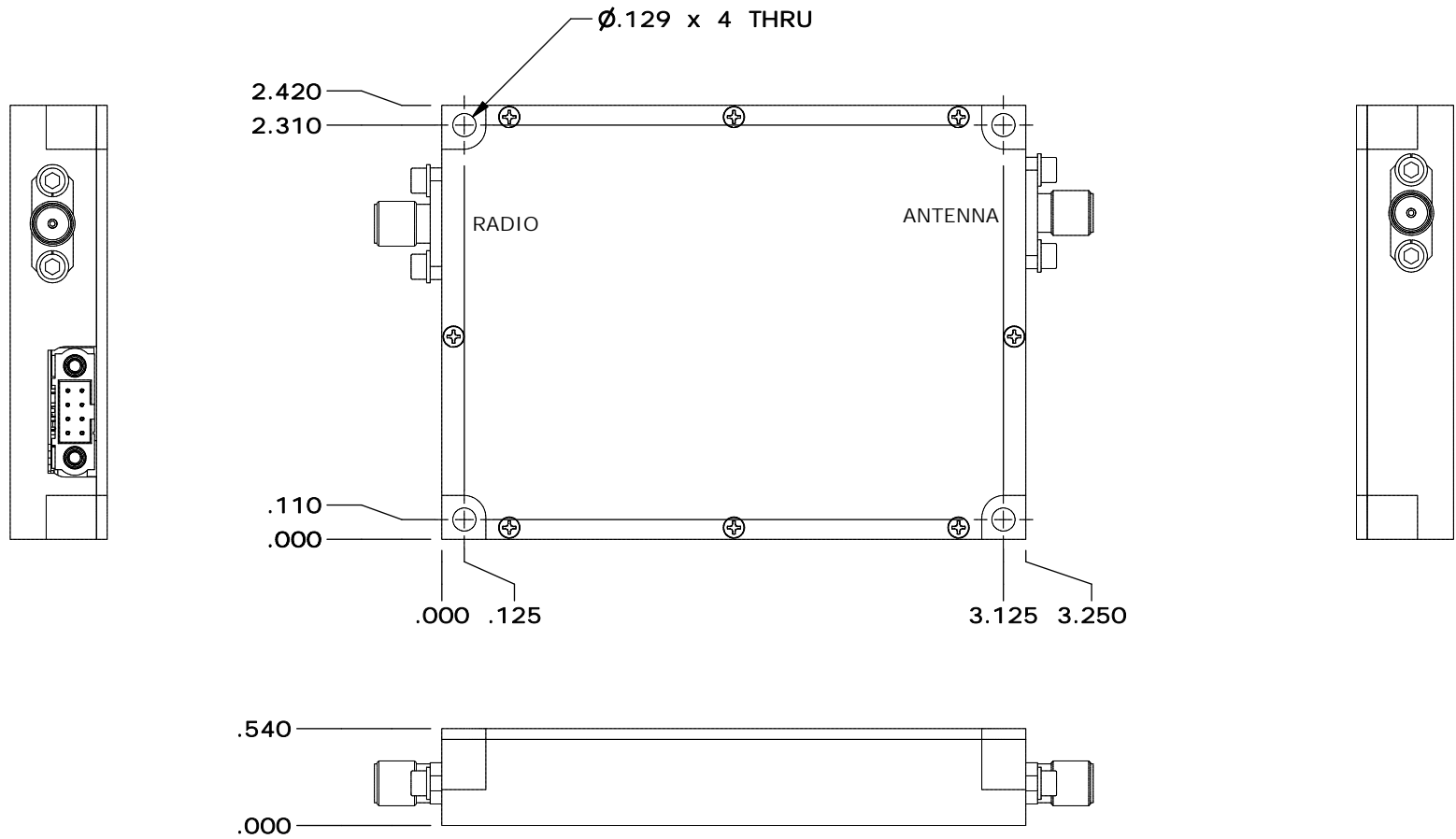
ENVIRONMENTAL / PROTECTIONS			
PARAMETER	MIN	MAX	UNIT
Operating Temperature (Housing Temp.)	-40	+85	°C
Humidity Range	0-95		%
Altitude	0-30,000		ft.
Shock / Vibration	MIL-STD-810 and equivalents		--
Max RF Input	8		dBm
PA Baseplate Shutoff Temperature	+85		°C

INPUT/OUTPUT PINS		
AMPLIFIER CONNECTOR TYPE:		8 PIN RECTANGULAR MALE
TRIAD CABLE PART NUMBER:		CBL41
PIN LABEL	NAME	DESCRIPTION
1	TEMP	Temp Monitor: Temp in DegC = (Vout - 0.5V) * 100
2,4,6	GND	Ground
3	Amp Enable	TTL Hi or No Connection = Enable, TTL Lo = Disable
5,7	+VDC	Supply Voltage - Range Specified in Datasheet
8	SGND	Signal Ground

Configuration Options	
Model Number	Description
TA1217	No Heat Sink Included
TA1217 – HS	Standard Heat Sink
TA1217 – HSF	Heat Sink with Integrated Cooling Fan
TA1217 – HSX	Custom Heat Sink Configuration
TA1217 – DOX	Custom Amplifier Configuration (issued by Triad upon customer request)

Please confirm with Triad that the desired configuration is available prior to ordering.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
O	INITIAL RELEASE	7/10/19	SC



DRAWN	scopp	10/3/2013
DESIGNED	scopp	2/28/2018
CHECKED	SC	7/10/2019
ENG APPROVED		
MFG APPROVED		

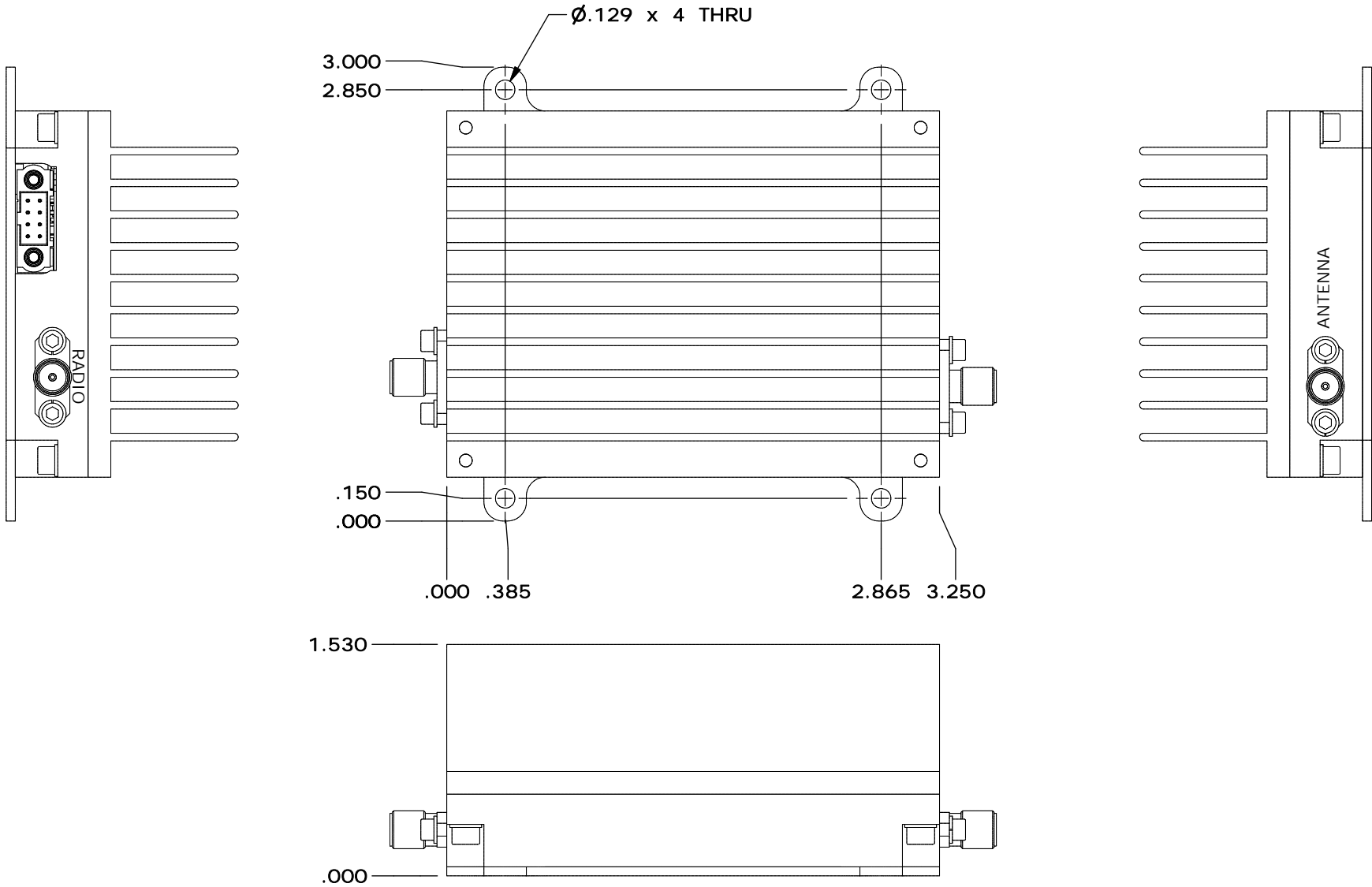


11 HARTS LANE SUITE 1
EAST BRUNSWICK, NJ 08816
855- 558- 1001

Housing Outline 191

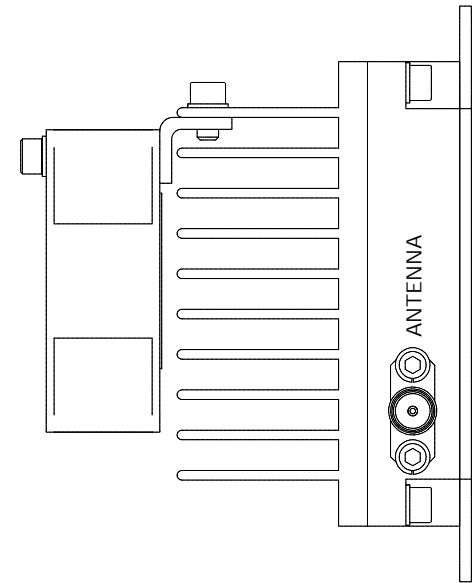
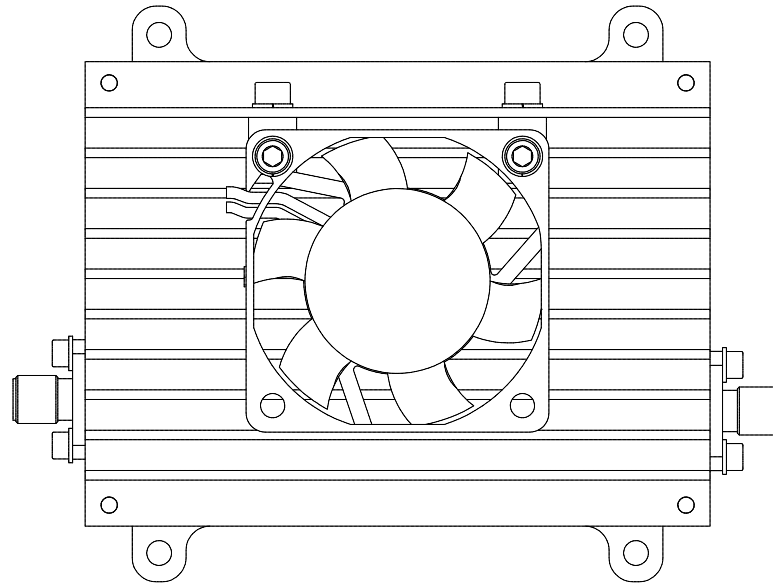
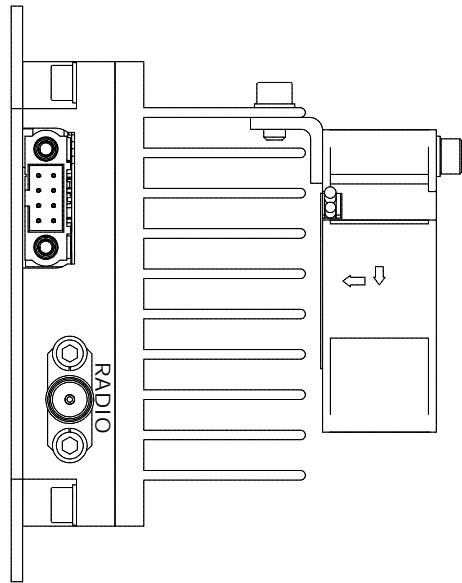
DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE TOLERANCES		SIZE A	DWG NO. OL_191	REV O
DECIMALS XX ±.01 .XXX ±.005	FRACTIONS ± 1/32	ANGLES ± 2°	SCALE: NONE	CAGE CODE 67DZ3
			SHEET 1 OF 3	

OPTIONAL HEATSINK

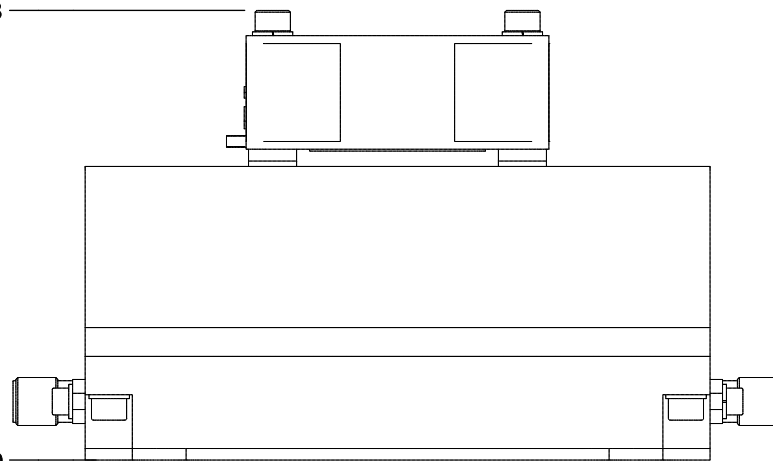


DRAWN	scopp	10/3/2013	Housing Outline 191		
DESIGNED	scopp	2/28/2018	SIZE	DWG NO.	REV
CHECKED	SC	7/10/2019	A	OL_191	0
ENG APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 2 OF 3
MFG APPROVED					

OPTIONAL HEATSINK AND COOLING FAN



2.343



DRAWN	scopp	10/3/2013	Housing Outline 191		
DESIGNED	scopp	2/28/2018			
CHECKED	SC	7/10/2019	SIZE	DWG NO.	REV
ENG APPROVED			A	OL_191	0
MFG APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 3 OF 3