

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**

- DC Current Monitor Output
- Temp. Monitor Output
- Over-Temperature Protection

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

RF / ELECTRICAL				
PARAMETER	MIN	TYP.	MAX	UNIT
Operating Frequency	960		1225	MHz
PSat Power Output	+53.0			dBm
Gain	52.0	55.0		dB
Gain Flatness		0.5	0.7	dB ¹
Input Return Loss		-12		dB
Operating Voltage	+28	+28	+32	VDC
Current Draw		15.0	18.0	A
Switching Time		2.0	5.0	uS

1 – Gain flatness recorded represents a peak-peak measurement across the **entire operating band**. Gain flatness is typically much lower across significant portions of this band. Consult the gain response plots for details if available.

MECHANICAL

PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	8.2 x 3.6 x 1.18	in
RF Connectors (Input / Output)	SMA-F / N-F	--
DC / Control Connector	7W2 Male	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--

ENVIRONMENTAL / PROTECTIONS

PARAMETER	MIN	MAX	UNIT
Operating Temp. (Housing Temp.)	-40	+85	°C
Storage Temp Range	-50	+95	°C
Humidity Range	0-100		%
Altitude	0-50,000		ft.
Shock / Vibration	MIL-STD-810 and equivalents		--
Max RF Input			dBm
PA Baseplate Shutoff Temperature	+ 85		°C

INPUT/OUTPUT PINS

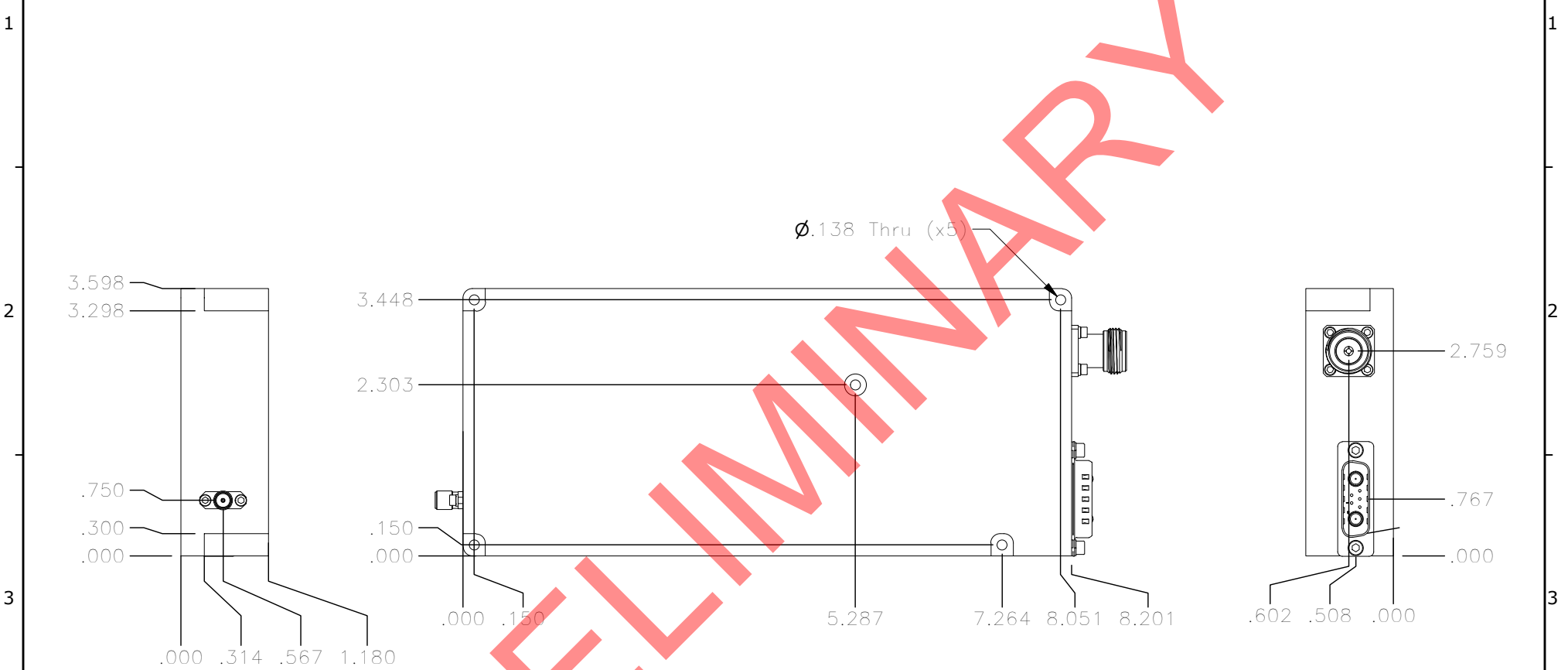
AMPLIFIER CONNECTOR TYPE:		
TRIAD CABLE PART NUMBER:		CBL96
PIN NUMBER	LABEL	DESCRIPTION
+VDC	A1	+28V
GND	A2	Ground
Current Sense	1	Analog voltage relative to IDD @ 10mV/100mA
Shutdown	2	Amplifier Disable : TTL Logic High(5V)
Temp	3	Analog voltage relative to Module's Temperature @ 10mV/°C+0.5V
NC	4,5	No Connection

Configuration Options

Model Number	Description
TA2001	No Heat Sink Included
TA2001 – HS	Standard Heat Sink
TA2001 – HSF	Heat Sink with Integrated Cooling Fan
TA2001 – HSX	Custom Heat Sink Configuration
TA2001 – DOX	Custom Amplifier Configuration (issued by Triad upon customer request)

OL_255

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
0	Initial Release	6/18/20	AK



DRAWN	AK	5/8/2020
DESIGNED	AK	5/7/2020
CHECKED		
ENG. APPROVED		
MFG. APPROVED		

TRIAD RF SYSTEMS
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 EAST BRUNSWICK, NJ 08816
 855-558-1001

DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE			SIZE	DWG. NO.	REV
TOLERANCES			A	OL_155	0
DECIMALS	FRACTIONS	ANGLES	SCALE: NONE		
.XX ± .01	± 1/32	± 2°	CAGE CODE	67DZ3	SHEET 1 OF 1
.XXX ± .005					