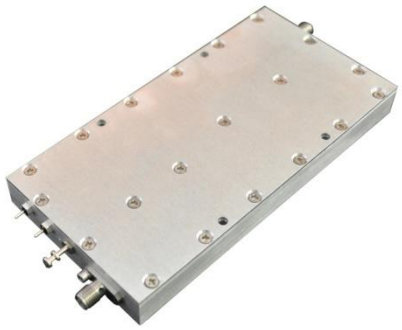
DCH SYSTEMS

TXM115 |3600-3800 MHz 25W PA

DESCRIPTION

This class A GaAs 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

- Over / Under / Reverse Voltage Protection
- Forward Power Measurement
- Reflected Power Measurement
- High Speed On/Off Control
- Temperature Output
- Optional Heatsink

APPLICATIONS

- Military / Commercial Data links
- Telecommunications
- BTS / Repeaters / DAS
- Test and Measurement
- General Purpose Lab Use

RF / ELECTRICAL

PARAMETER	MIN	TYP	MAX	UNIT
Operating Frequency	3600		3800	MHz
P1dB Power Output	43.5	44.0		dBm
PSat Power Output	44.0	44.5		dBm
Gain	43.0	44.0		dB
Gain Flatness		0.5	0.8	dB
Linear Power		37.0		dBmdBm
Linear Power Test Conditions	W-CDMA @ -55 dBc ACPR			--
Input Return Loss	14	18		dB
Operating Voltage	12		14	VDC
Current Draw		7.5	8.4	A
Quiescent Current Draw		7.5		A
Switching Time			1.0	uS

MECHANICAL

PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	5 x 2.5 x 0.553	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	--

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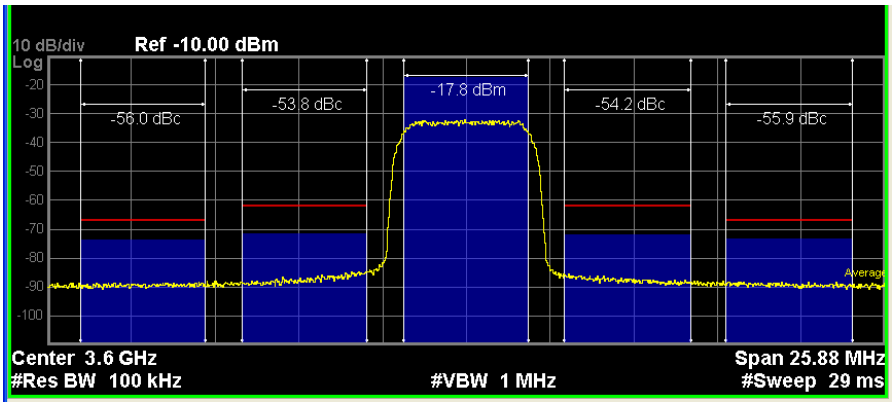
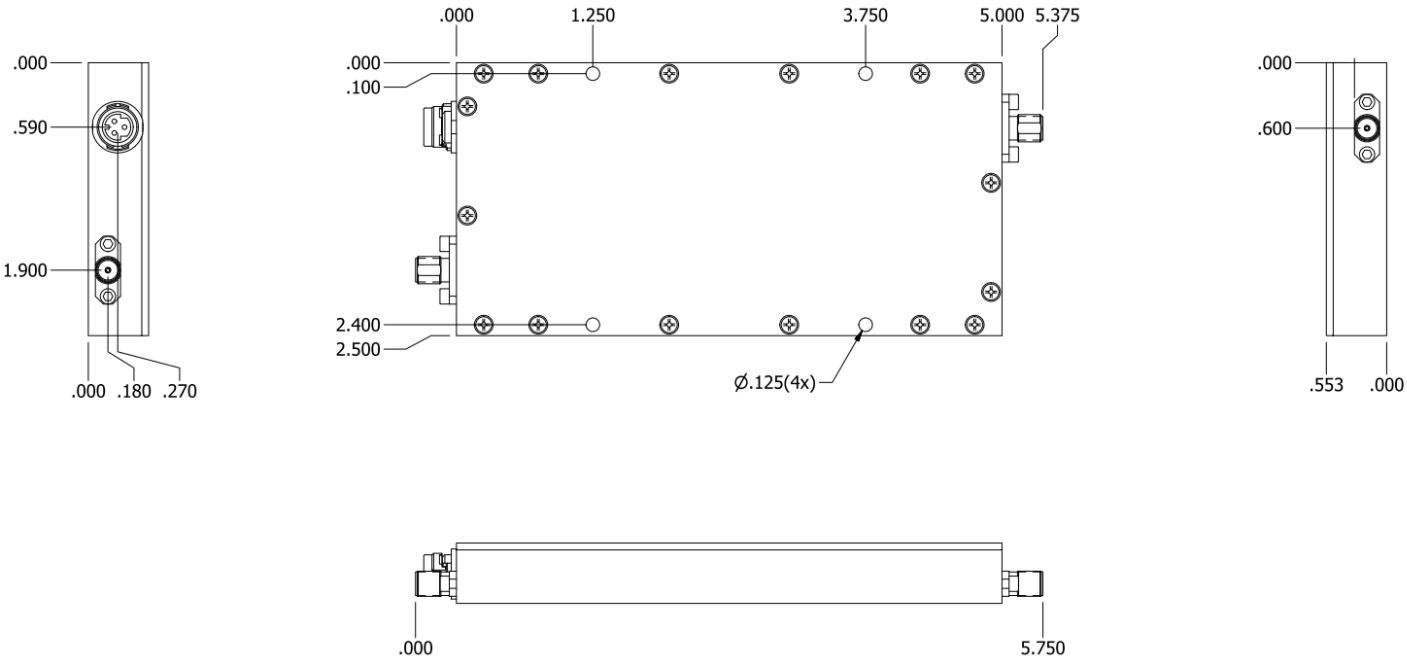
ENVIRONMENTAL / PROTECTIONS

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	3.5		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	85		°C

ACPR PLOT - 37 dBm W-CDMA



OUTLINE DRAWING



DC / CONTROL PINS

PIN LABEL	NAME	DESCRIPTION
1	+VDC	Supply Voltage - Range Specified in Datasheet
2	+VDC	Supply Voltage - Range Specified in Datasheet
3	TEMP	Temp Monitor: Temp in DegC = (Vout - 0.5V) / 10
4	I/O	On / Off Control (+5V = On / 0V = Off)
5	REV	Reflected Power Measurement -
6	FWD	Forward Power Measurement -
7	GND	