DCH SYSTEMS

TXM081 |800-900 MHz 50W 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	800		900	MHz
P1dB Power Output	46.5	47.0		dBm
PSat Power Output	47.0	47.0		dBm
Gain	46.0	47.0		dB
Gain Flatness		0.3	0.5	dB
OIP3		59		dBm
OIP3 Measurement Conditions	2 Tone @ 34 dBm / Tone, 10 MHz Spacing			--
Input Return Loss	18	20		dB
Operating Voltage	12		14	VDC
Current Draw		12.0	14.0	A
Quiescent Current Draw		15.0		A
Switching Time			1	uS

MECHANICAL

PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	6 x 3.5 x 0.693	in.
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	7W2 Male	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Thru Holes	--

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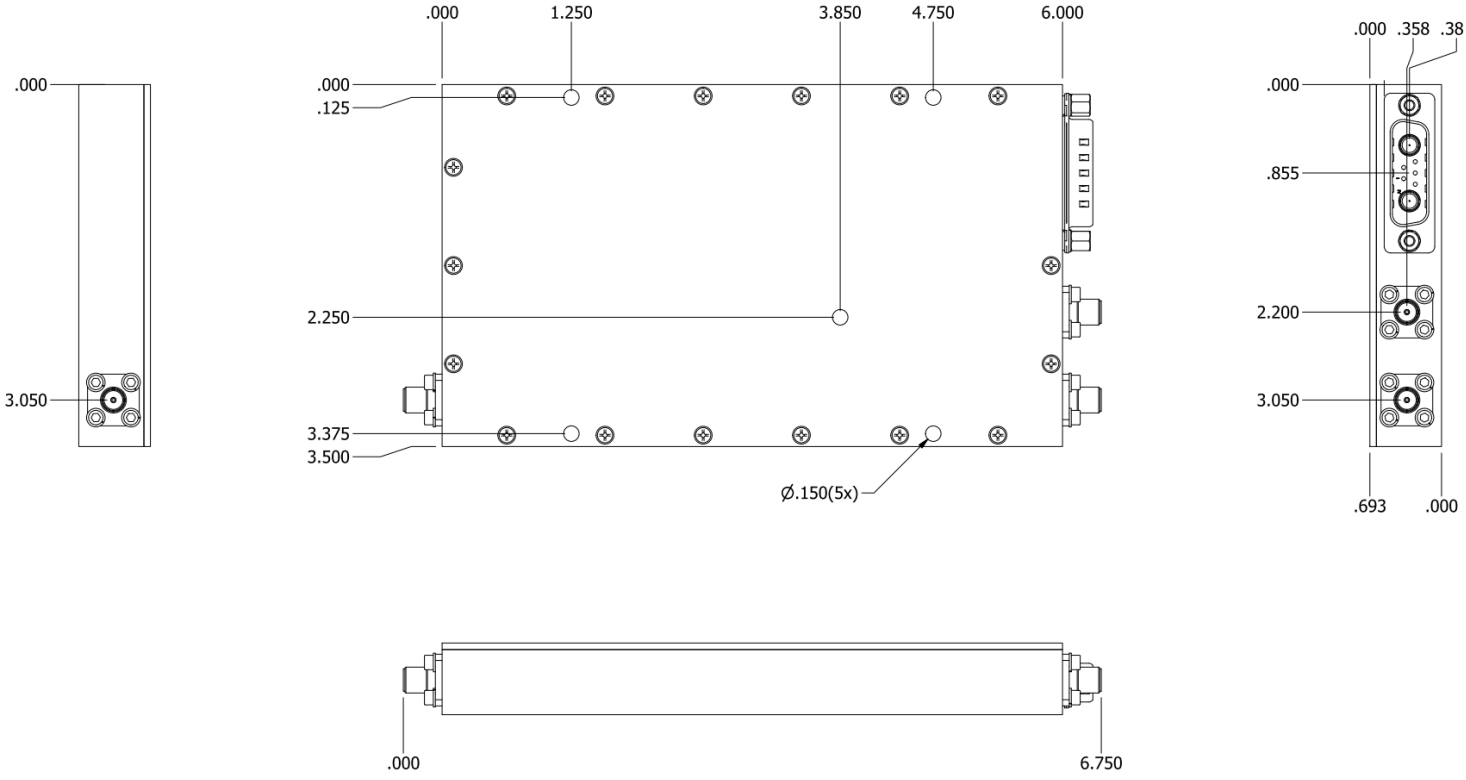
ENVIRONMENTAL / PROTECTIONS

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

OUTLINE DRAWING



DC / CONTROL PINS

PIN LABEL	NAME	DESCRIPTION
A1	GND	Ground
A2	+VDC	Supply Voltage - Range Specified in Datasheet
1	TEMP	Temp Monitor: Temp in DegC = (Vout - 0.5V) / 10
2	I/O	On / Off Control (+5V = On / 0V = Off)
3	REV	Reflected Power Measurement -
4	GND	Detector Ground
5	FWD	Forward Power Measurement -