

## 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  
Reflected Power Measurement  
Temperature Output

Forward Power Measurement  
High Speed On/Off Control  
Optional Heatsink

Specifications subject to change without notice. Typical performance at +12VDC at +25°C in a 50Ω system

RF / ELECTRICAL				
PARAMETER	MIN	TYP	MAX	UNIT
Operating Frequency	3600		3800	MHz
P1dB Power Output	+46.0	+47.0		dBm
Gain	46.0	47.0		dB
Gain Flatness		0.0	1.0	dB
Linear Power Output		40.0		dBm
Input Return Loss	-14	-16		dB
Operating Voltage	+11	+12	+13	VDC
Current Draw		15.0	17.0	A
Quiescent Current Draw		16.0		A
Switching Time		1.0	2.0	μS

**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	--
Weight	14	oz
Weight with Heatsink	24	oz

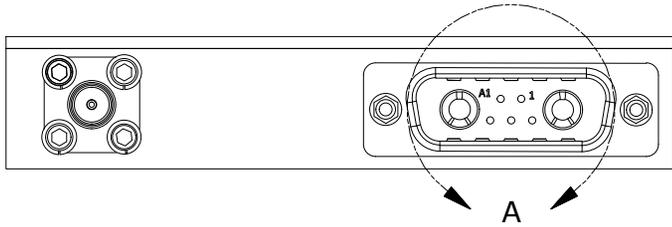
**ENVIRONMENTAL / PROTECTIONS**

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	+3		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	+ 90		°C

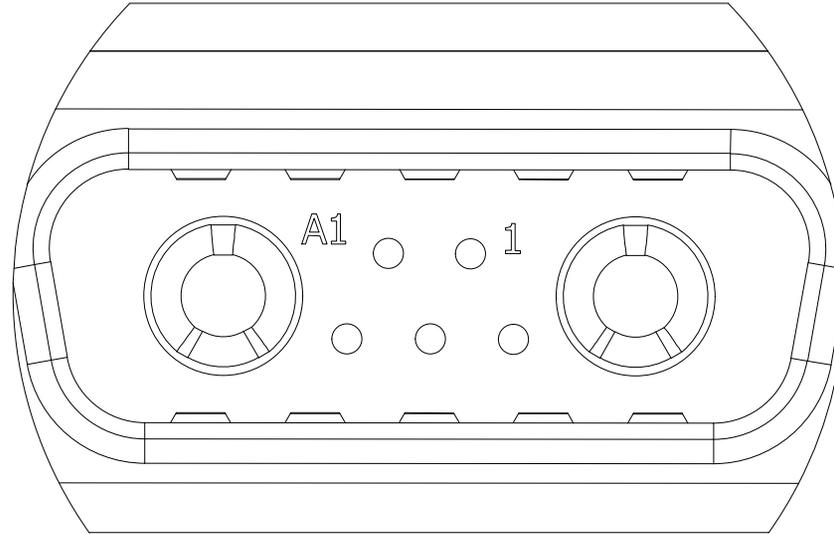
**DC / CONTROL PINS**

PIN LABEL	NAME	DESCRIPTION
A1	GND	Ground
1	TEMP	Temp Monitor: Temp in DegC = (Vout - 0.5V) / 10
2	Amp Enable	TTL On/Off Low=Enable, High=Disable
3	NC	Not Connected
4	GND	Ground
5	NC	Not Connected
A2	+VDC	Supply Voltage - Range Specified in Datasheet





DETAIL A



CONNECTOR PINOUT		
PIN	FUNCTION	NOTES
1	TEMP	Temp Monitor: Temp in DegC = (Vout - 0.5V) / 10
2	AMP ENABLE	TTL On/Off Low=Enable, High=Disable
3	NC	Not Connected
4	GND	Ground
5	FWD	Forward Power Measurement
A1	GND	Ground
A2	+VDC	Supply Voltage - Range Specified in Datasheet

NOTES:

1. P/N OF CONNECTOR ON AMPLIFIER: CONNEC 3007W2PCM99A10X
2. EXACT PINOUT MAY VARY WITH MODEL AND CUSTOMER SPECIFICATIONS

DRAWN	AHA	7/9/2014	Housing Outline 107		
DESIGNED	DMC	10/6/2013			
CHECKED	BG	7/9/2014	SIZE	DWG NO.	REV
ENG. APPROVED			A		0
MFG APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 2 OF 3

A

B

C

D

E

1

1

2

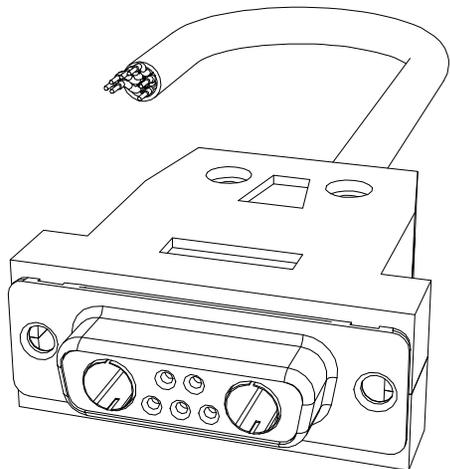
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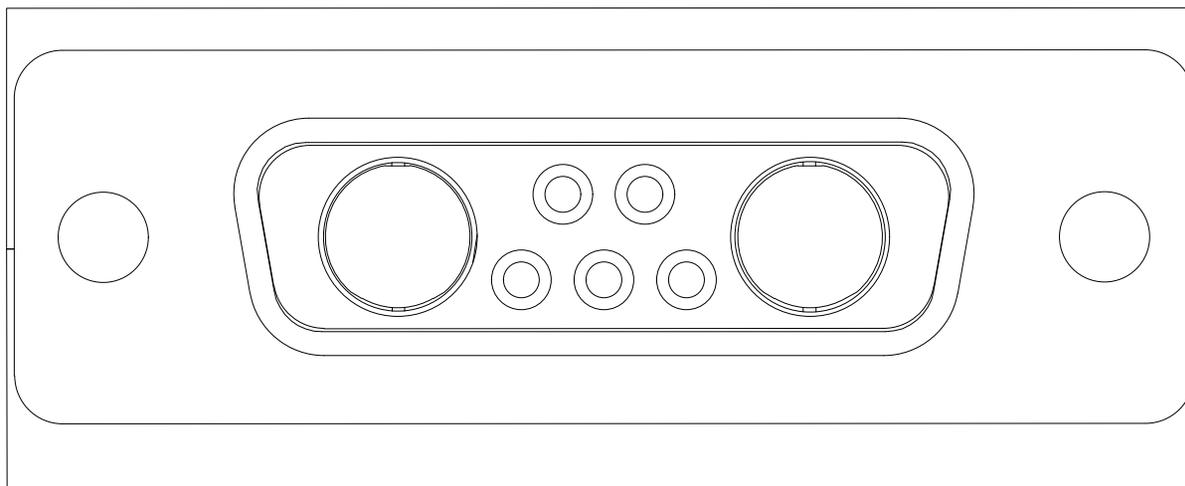
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4

4



MATE CABLE



3007W2SCM99A10X

NOTES:

- 1. P/N OF MATING CONNECTOR REQUIRED: CONNEC 3007W2SCM99A10X OR EQUIVALENT
- 2. P/N OF BACKSHELL/HOOD: EMERSON NETWORK POWER CON AIM - CAIMBRIDGE 40-9715H
- 3. TRIAD CABLE P/N: C12080301
- 4. WIRE DIAMETER: 24 AWG

DRAWN	AHA	7/9/2014	Housing Outline 107		
DESIGNED	---	6/4/2014			
CHECKED	BG	7/9/2014	SIZE	DWG NO.	REV
ENG. APPROVED			A		0
MFG APPROVED			SCALE: NONE	CAGE CODE 67DZ3	SHEET 3 OF 3

A

B

C

D

E