

PA015018-33 Narrow Band Power Amplifier 1.5 to 1.9GHz

PRELIMINARY DATA SHEET

www.aeroflex.com/bband



DESCRIPTION

Our new innovative Power Amplifier designs provide better performance and reliability at half the cost of traditional designs. Our team of engineers can custom design Power Amplifiers using latest CAD Simulation software to meet even the most demanding specifications.

FEATURES

- ❑ 2 Watt CW Output Power
- ❑ Low Noise - Less than 4 dB
- ❑ 50% Cost Savings over Traditional Designs
- ❑ High Reliability and Better Thermal Performance
- ❑ Packaging – Hermetic / Non-Hermetic

SPECIFICATIONS

Absolute Maximum Ratings¹

PARAMETER	SYMBOL	MIN	MAX	UNITS
Operating Temperature – Case	T_{MO}	-40	+85	°C
Storage Temperature – Case	T_{MS}	-40	+125	°C
Negative Supply Voltage	V_{-SS}	-7	-	V
Positive Supply Voltage	V_{+SS}	-	+15	V

1. Stresses above those listed under "Absolute Maximums Rating" may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions above those indicated in the operational sections of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

Nominal Operating Conditions

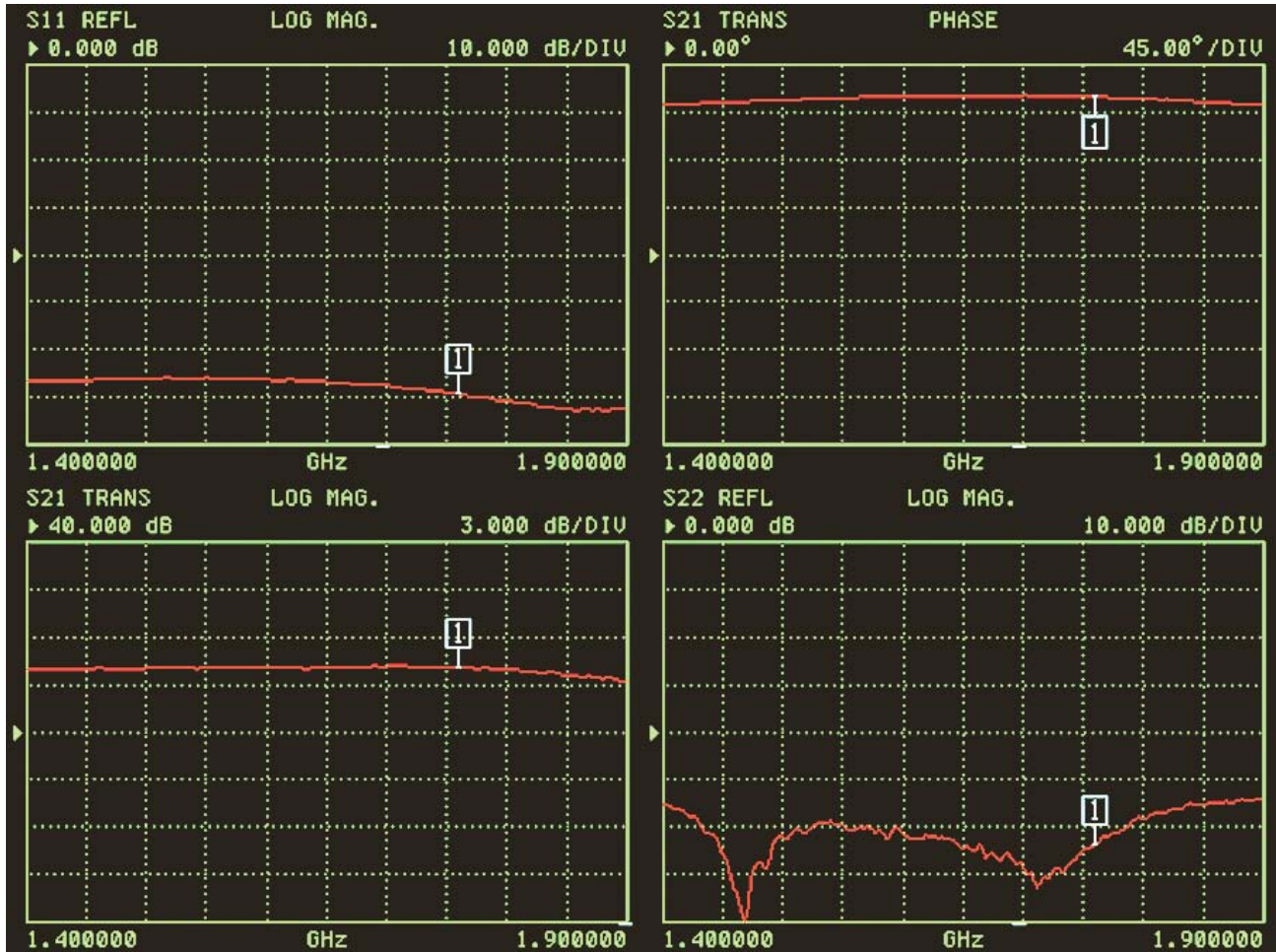
PARAMETER	CONDITIONS	MIN	MAX	UNITS
Temperature, T_O	Full Range	-40	+75	°C
Positive Supply Voltage, V_{PS}		+12	+15	V
Negative Supply Voltage, V_{NS}		-6.25	-5.75	V

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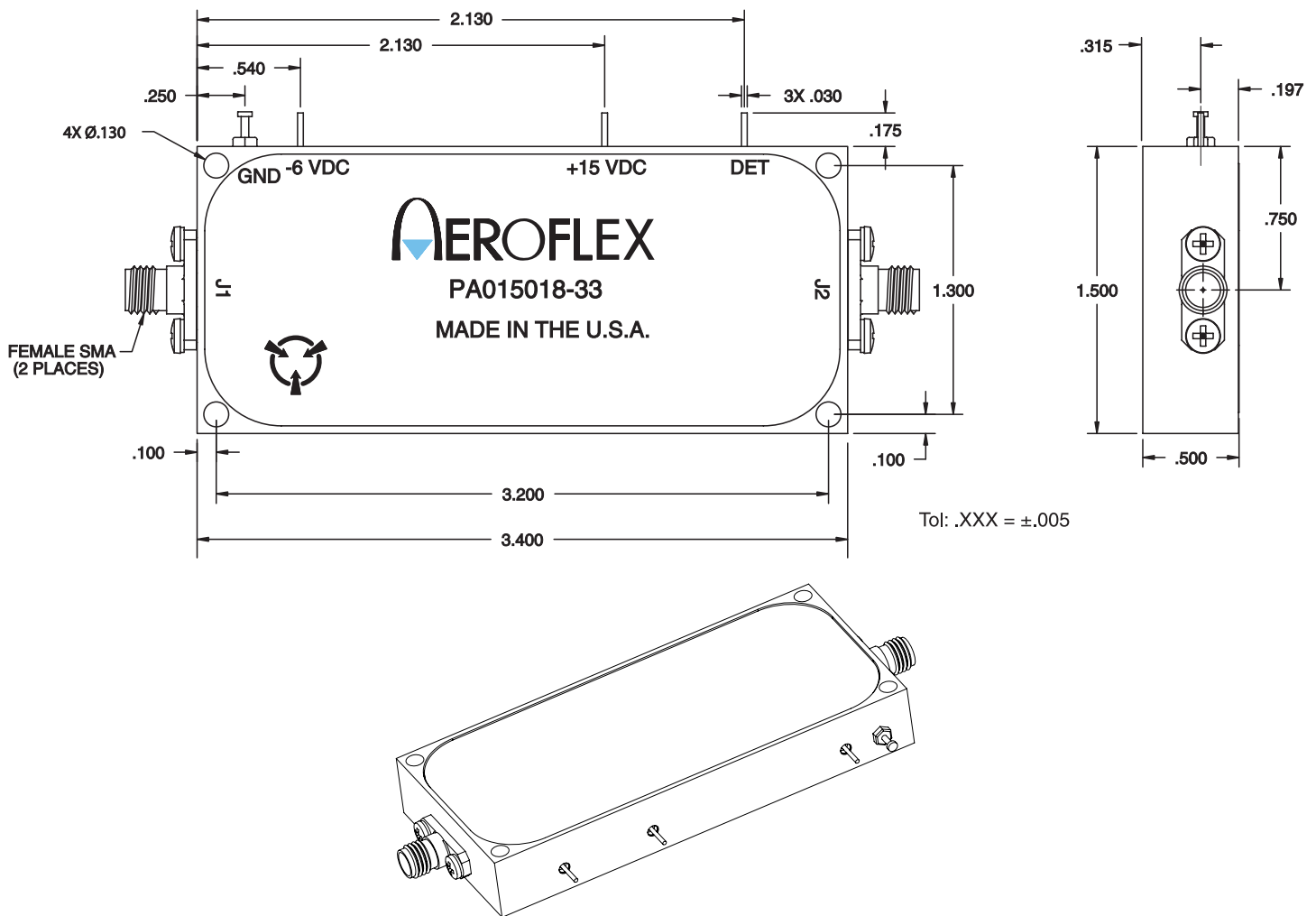
Electrical Characteristics

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
Frequency Range		1.5	-	1.9	GHz
Power Output	3dB Compression Point	+33	+34	+35	dBm
Power Output Variation	Over Frequency, Temperature and RF Input Power	-1	-	+1	dBm
Gain		45	-	-	dB
Gain Flatness		-1	-	+1	dB
Noise Figure		-	-	4	dB
RF Input Return Loss	Reference to 50 ohms	-	1.5:1	2.0:1	
RF Output Return Loss	Reference to 50 ohms	-	1.5:1	2.0:1	
Fault Monitor Output (DET pin)					
TTL "0"	J2 < +28dBm	-	-	-	-
TTL "1"	J2 ≥ +28dBm	-	-	-	-
Supply Voltage					
Positive		+12	-	+15	V
Negative		-	-6	-	V
Supply Current					
+12v, +15V		-	950	-	mA
-6V		-	30	-	mA

S-PARAMETERS



OUTLINE DRAWING



ORDERING INFORMATION

MODEL NUMBER	HERMETICITY	PACKAGE
PA015018-33H	Hermetic	3.4L x 1.5W x .50Ht
PA015018-33	Non Hermetic	

PLAINVIEW, NEW YORK
Toll Free: 800-THE-1553
Fax: 516-694-6715

INTERNATIONAL
Tel: 805-778-9229
Fax: 805-778-1980

NORTHEAST
Tel: 603-888-3975
Fax: 603-888-4585

SE AND MID-ATLANTIC
Tel: 321-951-4164
Fax: 321-951-4254

WEST COAST
Tel: 949-362-2260
Fax: 949-362-2266

CENTRAL
Tel: 719-594-8017
Fax: 719-594-8468

www.aeroflex.com info-ams@aeroflex.com

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Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused