



41 dB Gain, 12 Watt Psat, 800 MHz to 2 GHz, High Power High Gain Amplifier, 50 dBm IP3, SMA

TECHNICAL DATA SHEET

PE15A5035

The PE15A5035 is a 12 W high gain Class A/AB coaxial power amplifier operating in the 0.8 to 2.0 GHz frequency range. The amplifier offers 12 Watts typical saturated power and 41 dB typical small signal gain with ± 1.5 dB maximum gain flatness. The amplifier requires typically a +13V DC power supply. The connectorized SMA module is unconditionally stable and operates over the temperature range of 0°C and +50°C.

Features

- 0.8 GHz to 2.0 GHz Frequency Range
- Psat 12 Watts typ
- Small Signal Gain: 41 dB min
- Gain Flatness ± 1.5 dB max
- IP3 50 dBm typ
- 50 Ohms Input and Output Matched
- Unconditionally Stable
- Regulated Supply

Applications

- Military Radio
- Communication Systems
- High Gain Driver Power Amplifier
- High Gain Output Power Amplifier

Electrical Specifications (TA = +25°C, DC Voltage = 13Volts, DC Current = 5,000mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.8		2	GHz
Small Signal Gain	41			dB
Gain Flatness			± 1.5	dB
Input Power			+10	dBm
Psat		+40.8		dBm
Output Power at 1 dB Compression Point	+40			dBm
Output 3rd Order Intercept Point		+50		dBm
Harmonics @10 Watts		-20		dBc
Spurious @10 Watts		-60		dBc
Input VSWR			2:1	
TTL Control		"1" = On; "0" = Off		
TTL Control Enable		5		Volts
TTL Control Disable		0		Volts
Operating DC Voltage		13		Volts
Operating DC Current			5,000	mA
Operating Temperature Range	0		+50	°C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [41 dB Gain, 12 Watt Psat, 800 MHz to 2 GHz, High Power High Gain Amplifier, 50 dBm IP3, SMA PE15A5035](#)



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Mechanical Specifications

Size

Length	6.8 in [172.72 mm]
Width	2.7 in [68.58 mm]
Height	1 in [25.4 mm]
Weight	1 lbs [453.59 g]
Input Connector	SMA Female
Output Connector	SMA Female
Cooling	ADEQUATE HEATSINK REQUIRED

Environmental Specifications

Temperature

Operating Range	0 to +50 deg C
Humidity	95% Non-Condensing
Shock	Normal Truck Transport
Vibration	Normal Truck Transport
Altitude	10000 feet Above Sea Level

Compliance Certifications (visit www.Pasternack.com for current document)

Not RoHS Compliant

Plotted and Other Data

Notes:

- Values at +25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.
- Heat Sink Required for Proper Operation, Unit is cooled by conduction to heat sink.

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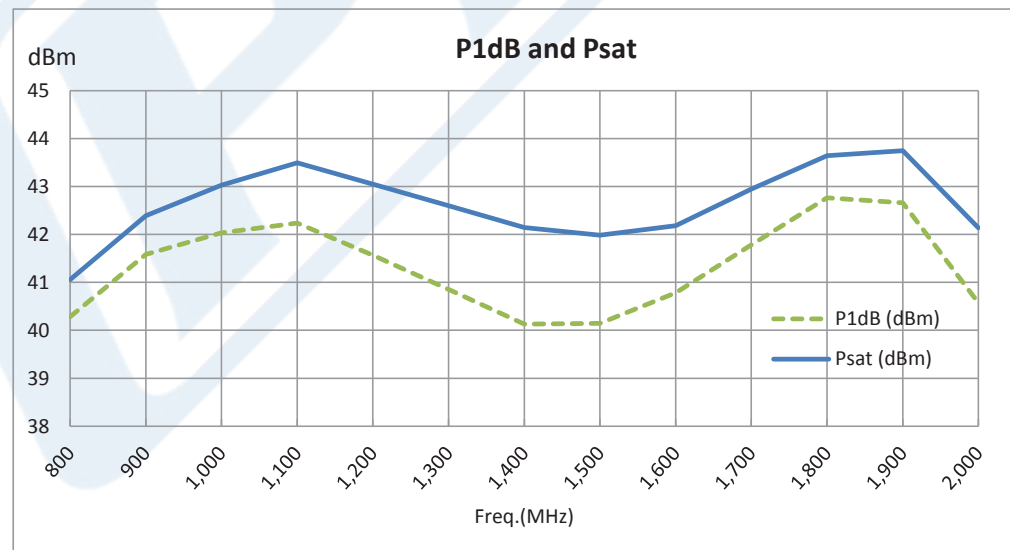
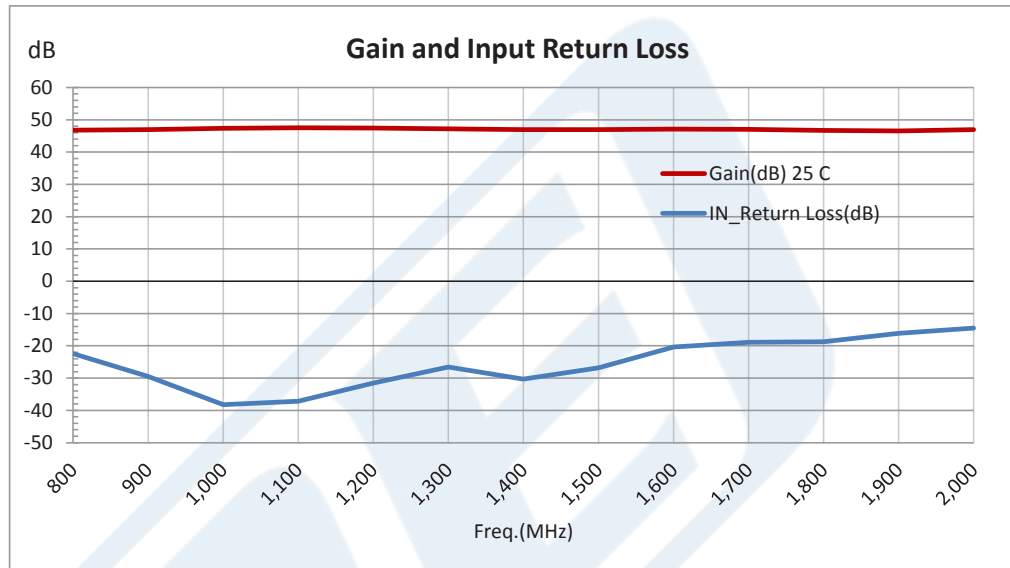


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Typical Performance Data



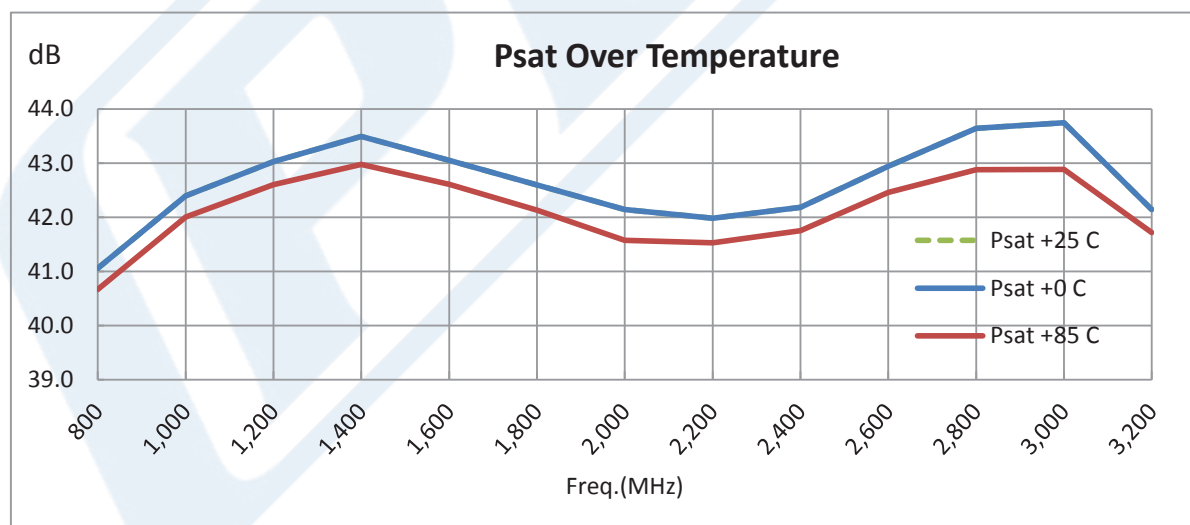
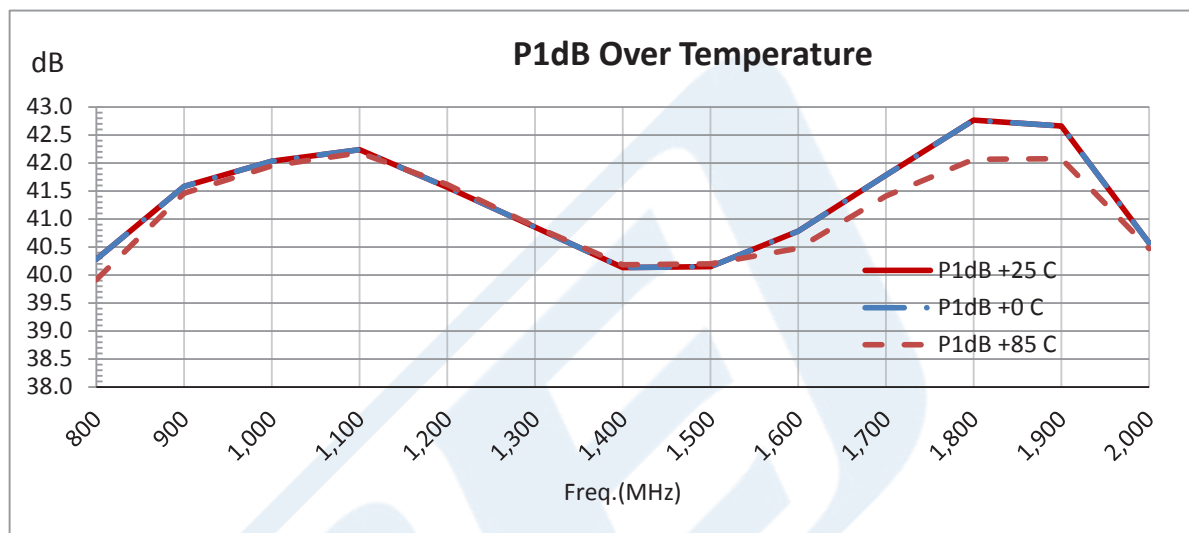
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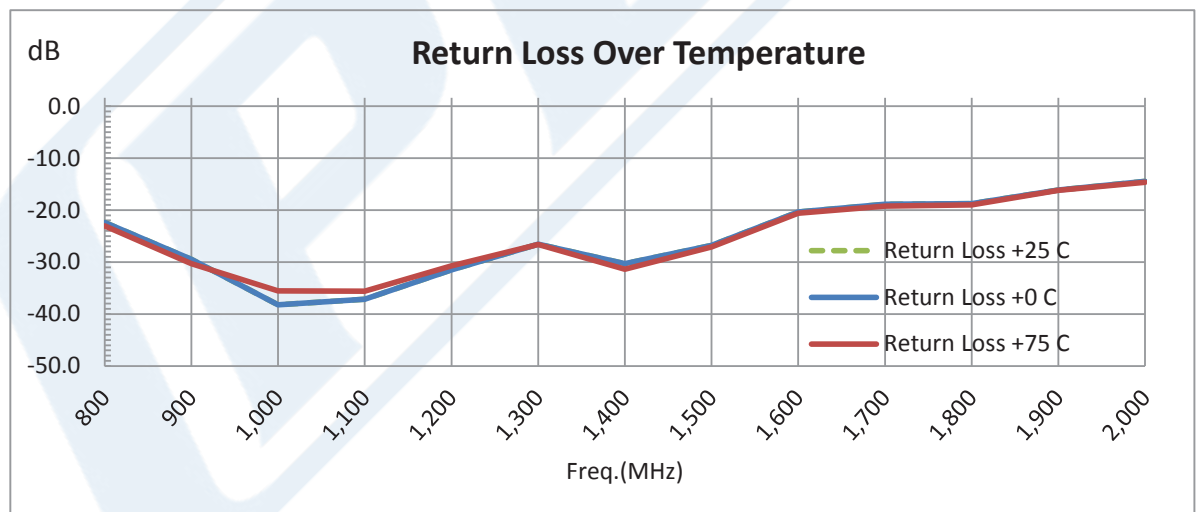
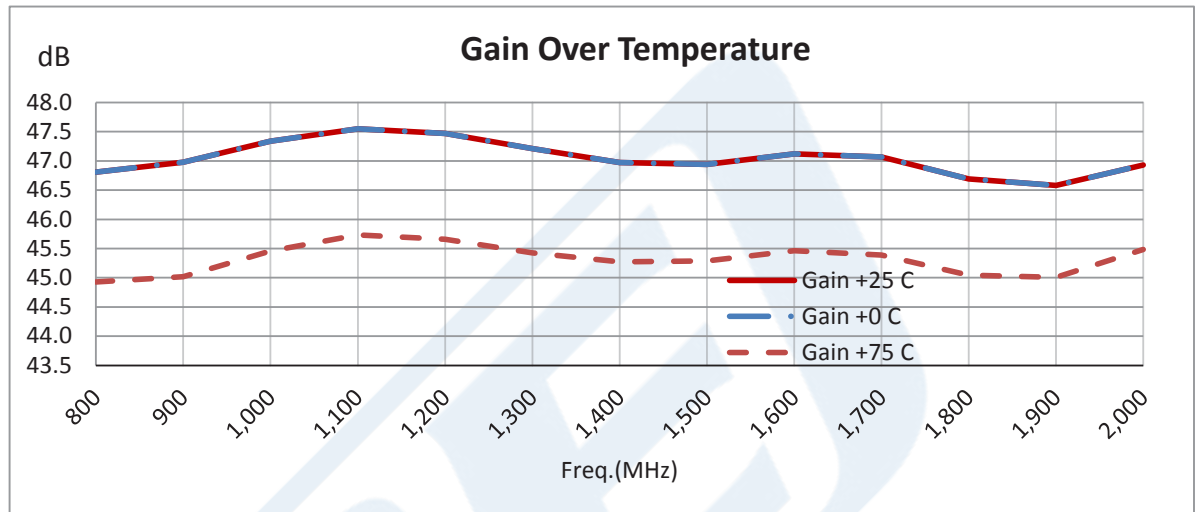
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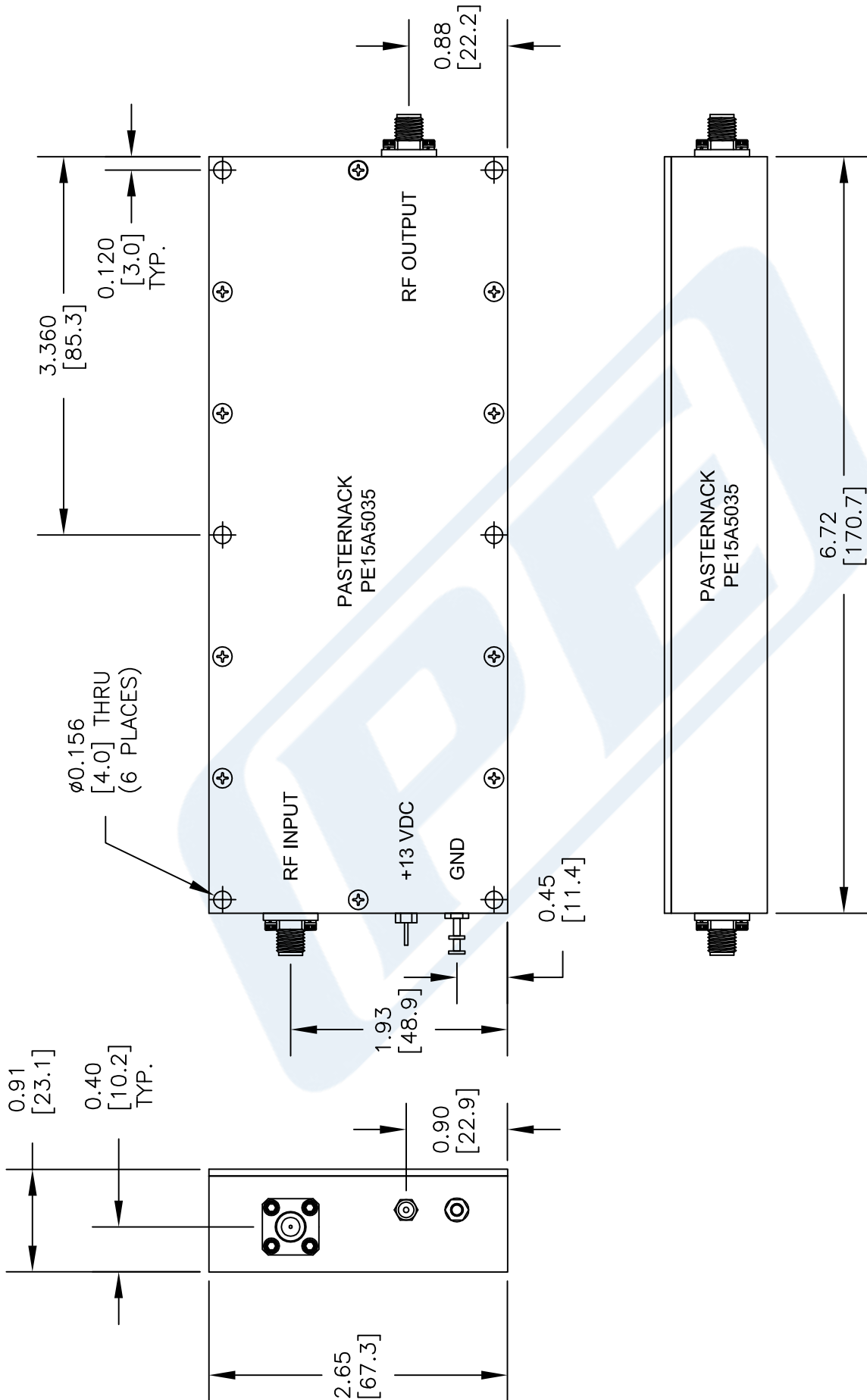


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PE15A5035 CAD Drawing

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DWG TITLE

PE15A5035

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

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FSCM NO. 53919

CAD FILE 100314

SCALE N/A

SIZE A

150