

Available as:

TM7510, 4 Pin TO-8 (T4)
 TN7510, 4 Pin 0.450" Sq. Surface Mount (SM3)
 BX7510, SMA Connectorized Housing (H1)

RF/Microwave Amplifier



Features

- Standard +15 Volt Supply
- Wide 50 – 1000 MHz Bandwidth
- Environmental Screening Available

Technical Specifications

Characteristic		TYPICAL Ta = +25 °C	MIN/MAX Ta = -40°C to +85 °C
Frequency		50 – 1000 MHz	50 – 1000 MHz
Gain (dB)		23	22 Min.
Power @ 1 dB Comp. (dBm)		+26	+25 Min.
Reverse Isolation (dB)		-35	--
VSWR	In	1.5:1	2.0:1 Max.
	Out	1.5:1	2.0:1 Max.
Noise Figure (dB)		4.0	4.5 Max.
Power	Vdc	+15	+15
	mA	150	160 Max.

- 1) Typical values are measured at 25°C, but not guaranteed.
- 2) Care should always be taken to effectively ground the case of each unit.
- 3) Package outlines drawings below for reference only.

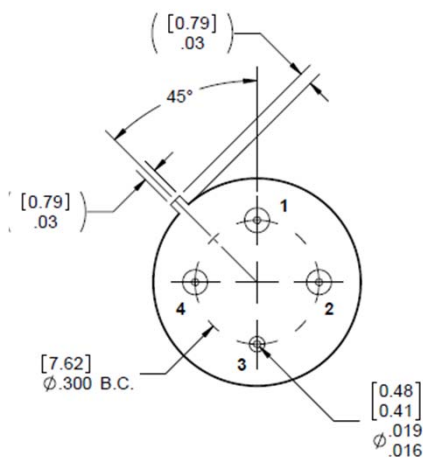
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point:	+50 dBm (Typ.)
Second Order Two Tone Intercept Point:	+45 dBm (Typ.)
Third Order Two Tone Intercept Point:	+38 dBm (Typ.)

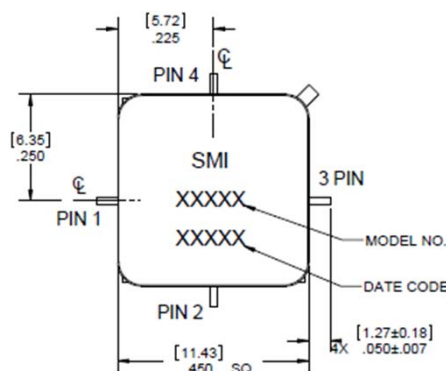
Note: Measured at 500 MHz

Absolute Maximum (No Damage) Ratings

Operating Temperature	-55°C to +100 °C
Storage Temperature	-62°C to +125°C
Case Temperature	+125 °C
DC Voltage	+18 Volts
Continuous RF Input Power	+13 dBm
Short Term RF Input Power	200 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 µsec Max.)



TM7510



TN7510

Instructions

Grounding Instructions	Care should be taken to effectively ground each unit.
Revisions	API reserves the right to make revisions to both product and/or the information contained within their datasheets without advanced notice.
Min./Max. Values	Specifications and Performance is guaranteed when tested in a 50 Ω (ohm) system.
Typical performance graphs and values are measured at 25°C, but not guaranteed.	

Outline Drawing (for reference only)

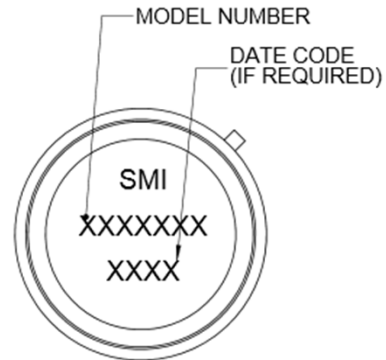
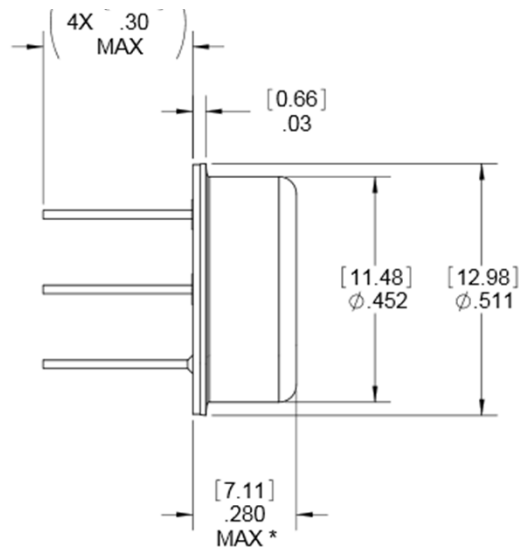
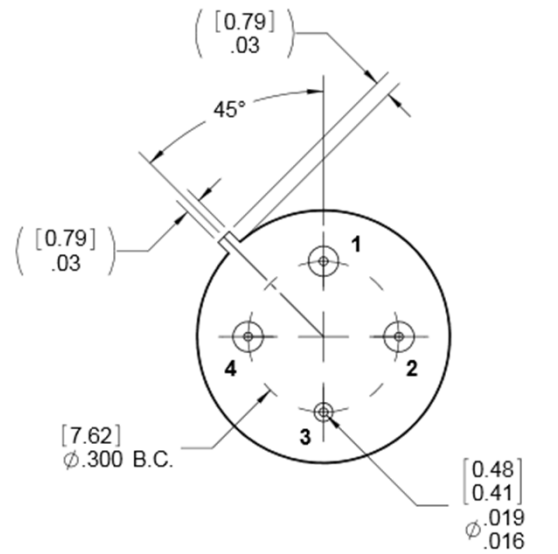
MATERIAL:

1. HEADER / LEADS - KOVAR
2. LID - NICKEL
3. FINISH:
HEADER / LEADS - GOLD/NICKEL PLATING
LID - NICKEL
4. DIMENSIONS ARE INCHES [mm]

TOLERANCE	
.XX	± .02 [.5]
.XXX	±.010 [.25]

AMPLIFIER

PIN 1 - +VDC VOLTAGE
 PIN 2 - 50 OHM INPUT
 PIN 3 - (GROUND) DC & RF
 PIN 4 - 50 OHM OUTPUT



* COMPONENT HEIGHT MAY VARY
 ACCORDING TO SPECIFIC DEVICE
 CONSULT SPECTRUM MICROWAVE
 FOR ADDITIONAL INFORMATION
 IF REQUIRED