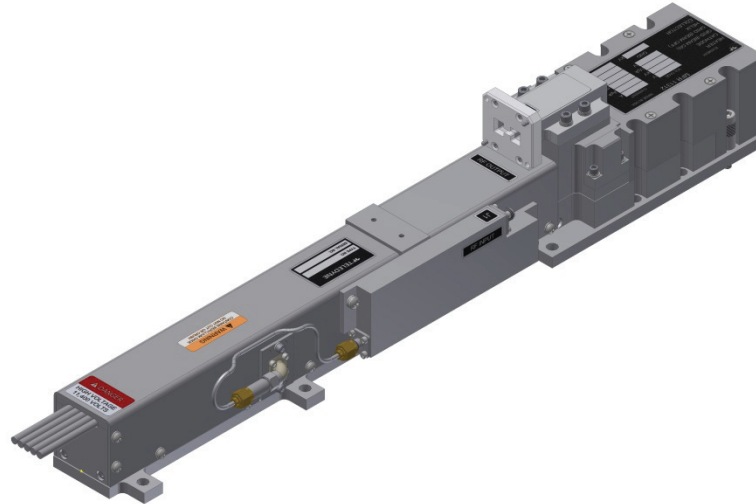


MTI 3444L

Pulse TWT

6.5 GHz – 18.0 GHz

- 6% Maximum Duty
- 1260 W Minimum Power
- 6.5 to 18.0 GHz
- -40° to 85° C
- 818 W Typ. Prime Power @6%
- 43-46 dB Typical Gain
- 17.3" L x 2.72" W x 3.3" H
(44 x 6.9 x 8.38 cm)



RF Performance

Freq (GHz)	Typ. Sat. Power Output (W)	Min. Spec. Power Output (W)	Typ. Gain @ Spec. Power (dB)
6.5	1320	1260	43
7.0	1580	1510	44
8.0	2140	1580	45
9.0	2340	1580	46
10.0	1660	1580	46
11.0	2140	1580	46
12.0	2450	1580	46
13.0	2510	1580	46
14.0	2450	1580	46
15.0	2400	1580	46
16.0	2240	1580	46
17.0	2000	1580	46
18.0	1700	1580	45

Typical power output is shown to illustrate capability.
Typical gain shown is with equalizer.

Typical Operating Conditions

Element	Voltage	Current	Power Supply Requirements		
			Voltage Min.	Voltage Max.	Current Max.
Heater	-6.3 Vdc	1.9 A	-6.1 Vdc	-6.5 Vdc	2.5 A
Helix					
with RF	Ground	450 mApk	Ground	Ground	500 mApk @ 6%
without RF	Ground	110 mApk	Ground	Ground	500 mApk @ 6%
Grid On	160 Vpk	4 mApk	100 Vpk	250 Vpk	20 mApk
Grid Off	-200 Vdc	0.1 mA	-200 Vdc	-500 Vdc	0.5 mA
Cathode (Ek)	-11.2 kV	1.65 Apk	-10.5 kV	-11.5 kV	1.9 Apk
Collector w/RF	7 kV	1.2 Apk	63% x Ek ±2%		1.9 Apk

Cathode voltage is measured with respect to ground.
Heater, Collector, and Grid voltages are measured with respect to Cathode.

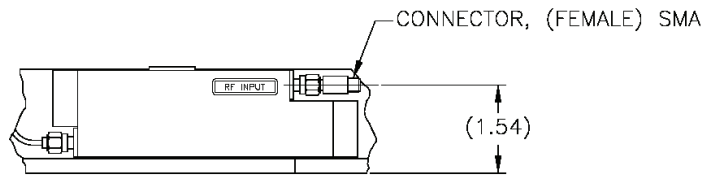
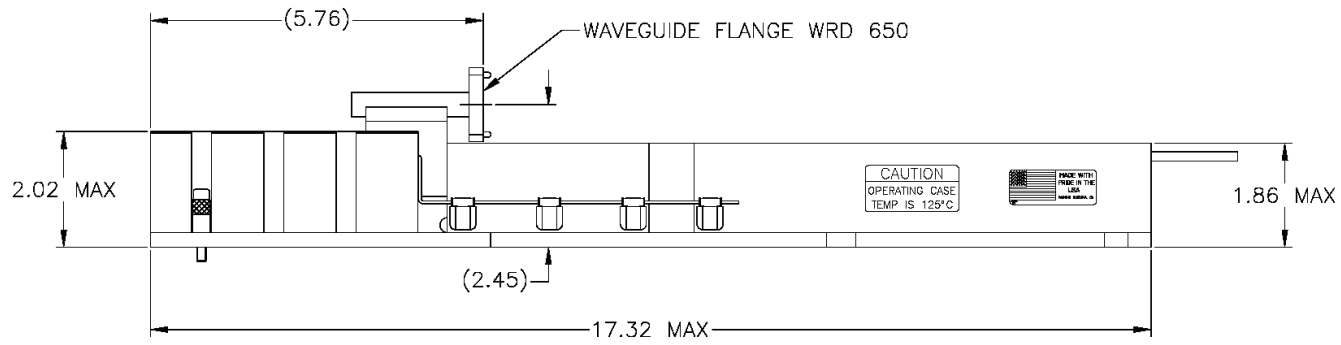
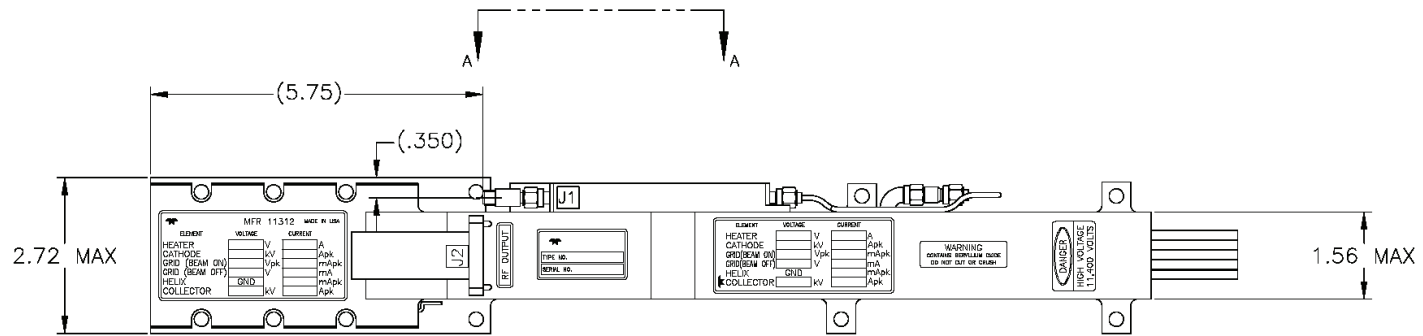
Performance

	Typical	Spec
Input VSWR.....	2.2:1	2.5:1
Output VSWR.....	2.3:1	2.5:1
Max. Duty	—	6%
Max. Pulsewidth	—	100 μs
Grid Capacitance.....	38 pF	50 pF
Min. Harmonic Separation.....	-3 dBc	-2 dBc
Noise Power Density (dBm/MHz)	2	3
Prime Power.....	818 W	950 W

This model number is controlled by the International Traffic in Arms Regulations, and can only be exported via a U.S. Department of State export license. They may not be transferred, transshipped on a non-continuous voyage, or otherwise be disposed of in any other country, either in their original form or after being incorporated into other end-items, without the prior written approval of the U.S. Department of State.

NOTES:

1. THERMOSTAT OPTIONS: N/C OR N/O



VIEW A-A
VIEW ROTATED 180° FOR CLARITY

SUBJECT TO CHANGE W/O NOTICE ISO 9001:2008 Registered

TELEDYNE MICROWAVE SOLUTIONS TWT Products <small>11361 Sunrise Park Dr., Rancho Cordova, CA (916) 638-3344</small>	
TITLE	MTI 3444L

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