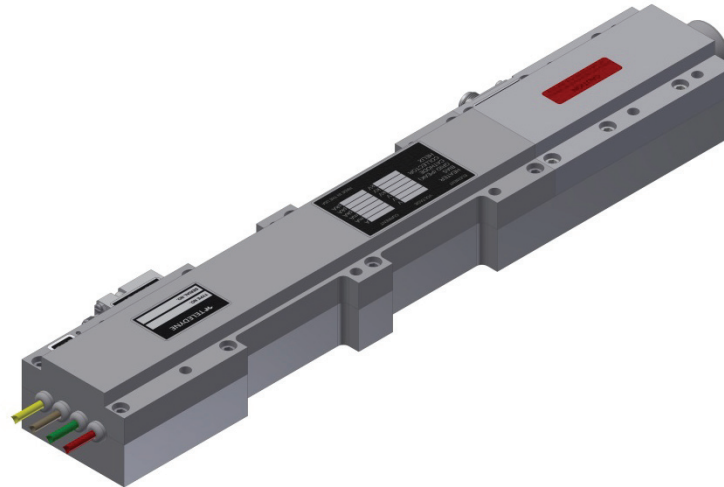


MTI 3044J

Pulse TWT

8.0 GHz – 18.0 GHz

- 4% Maximum Duty
- 1 kW Minimum Power
- 8.0 to 18.0 GHz
- -40° to 85° C
- 566 W Typ. Prime Power @4%
- 42-62 dB Typical Gain
- 14.35" L x 3" W x 1.7" H
(36.45 x 7.77 x 4.3 cm)



RF Performance

Freq (GHz)	Typ. Sat. Power Output (W)	Min. Spec. Power Output (W)	Typ. Gain @ Spec. Power (dB)
8.0	1170	1000	54
9.0	1475	1000	60
10.0	1580	1000	60
11.0	1780	1000	62
12.0	2140	1000	62
13.0	2250	1000	61
14.0	2090	1000	59
15.0	2000	1000	58
16.0	2000	1000	55
17.0	1900	1000	48
18.0	1250	1000	42

Typical power output is shown to illustrate capability.
Typical gain shown is without equalizer.

Typical Operating Conditions Element	Power Supply Requirements				
	Voltage	Current	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	325 mApk	Ground	Ground	500 mApk @ 4%
without RF	Ground	75 mApk	Ground	Ground	500 mApk @ 4%
Grid On	123 Vpk	1 mApk	100 Vpk	200 Vpk	30 mApk
Grid Off	-200 Vdc	0.2 mA	-200 Vdc	-500 Vdc	1 mA
Cathode (Ek)	-11.2 kV	1.6 Apk	-10.5 kV	-11.5 kV	1.8 Apk
Collector w/RF	8 kV	1.275 Apk		72% x Ek ±2%	1.8 Apk

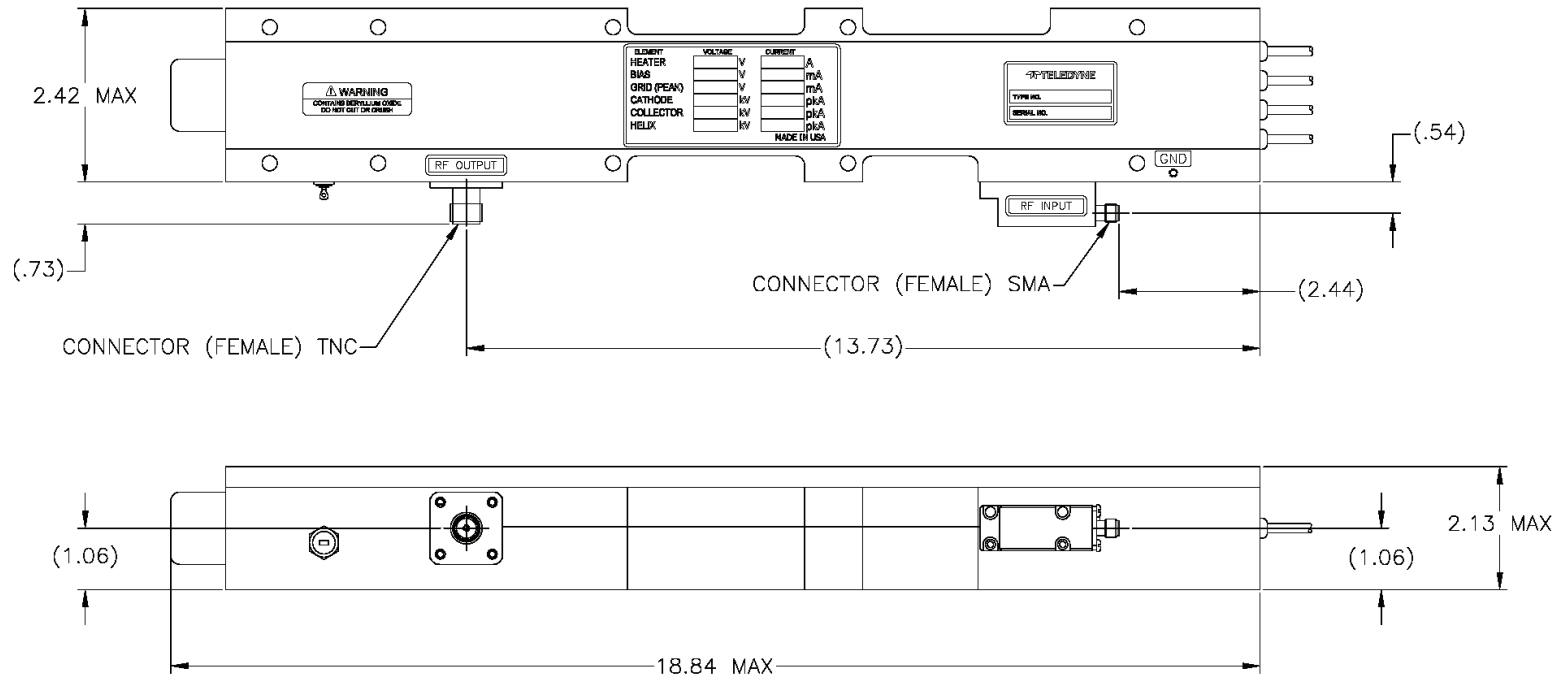
Cathode voltage is measured with respect to ground.
Heater, Collector, and Grid voltages are measured with respect to Cathode.

Performance	Typical	Spec
Input VSWR.....	2.1:1	2.5:1
Output VSWR.....	1.9:1	2.5:1
Max. Duty	—	4%
Max. Pulsewidth	—	100 μs
Grid Capacitance.....	46 pF	50 pF
Min. Harmonic Separation.....	-4.3 dBc	-3 dBc
Noise Power Density (dBm/MHz)	-12	-8
Prime Power.....	566 W	750 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



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

TELEDYNE MICROWAVE SOLUTIONS
TWT Products
11361 Sunrise Park Dr., Rancho Cordova, CA (916) 638-3344

TITLE
MTI 3044J

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