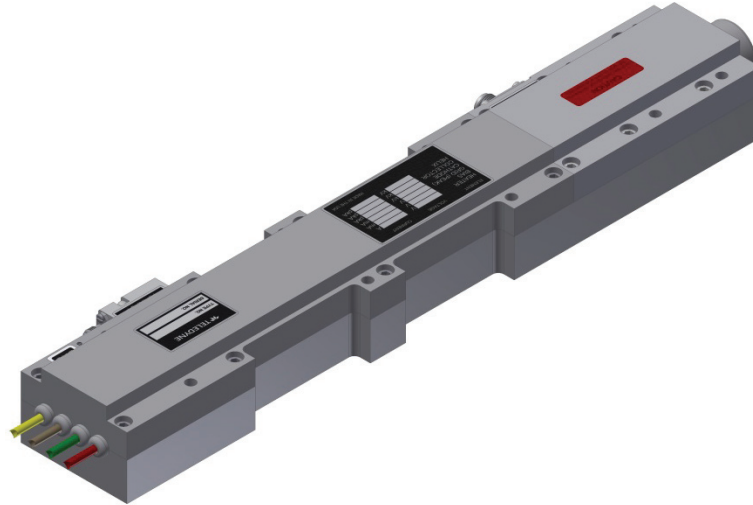


MTI 3044C

Pulse TWT

8.0 GHz – 12.4 GHz

- 4% Maximum Duty
- 1.2 kW Minimum Power
- 8.0 to 12.4 GHz
- -40° to 85° C
- 583 W Typ. Prime Power @4%
- 57 - 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	1500	1200	57
9.0	1600	1200	60
10.0	2000	1200	63
11.0	2000	1200	64
12.0	2300	1200	64
12.4	2300	1200	64

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

Typical Operating Conditions Element	Voltage	Current	Power Supply Requirements		
			Voltage Min.	Voltage Max.	Current Max.
Heater	-6.3 Vdc	1.9 A	-6.0 Vdc	-6.6 Vdc	2.2 A
Helix					
with RF	Ground	310 mApk	Ground	Ground	600 mApk @ 4%
without RF	Ground	75 mApk	Ground	Ground	600 mApk @ 4%
Grid On	134 Vpk	1 mApk	100 Vpk	220 Vpk	20 mApk
Grid Off	-150 Vdc	0.2 mA	-150 Vdc	-200 Vdc	1 mA
Cathode (Ek)	-11.4 kV	1.58 Apk	-10.5 kV	-11.5 kV	1.8 Apk
Collector w/RF	8.2 kV	1.27 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.

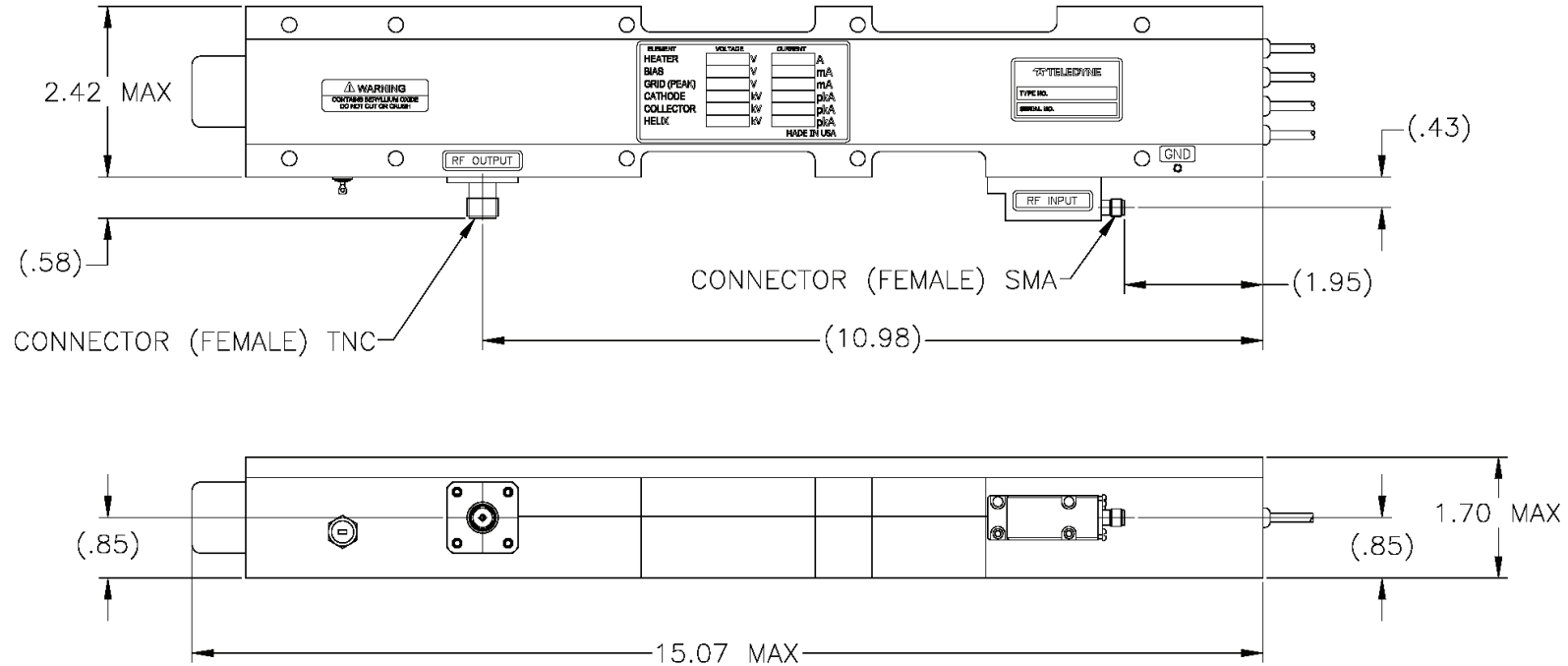
Performance	Typical	Spec
Input VSWR.....	1.6:1	2.5:1
Output VSWR.....	1.5:1	2.5:1
Max. Duty	—	4%
Max. Pulsewidth	—	100 μs
Grid Capacitance.....	46 pF	50 pF
Min. Harmonic Separation	-4.3 dBc	-3 dBc
Noise Power Density (dBm/MHz)	-12	-8
Prime Power.....	583 W	750 W

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.

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NOTES:

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



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

TELEDYNE MICROWAVE SOLUTIONS
TWT Products
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TITLE

MTI 3044C

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