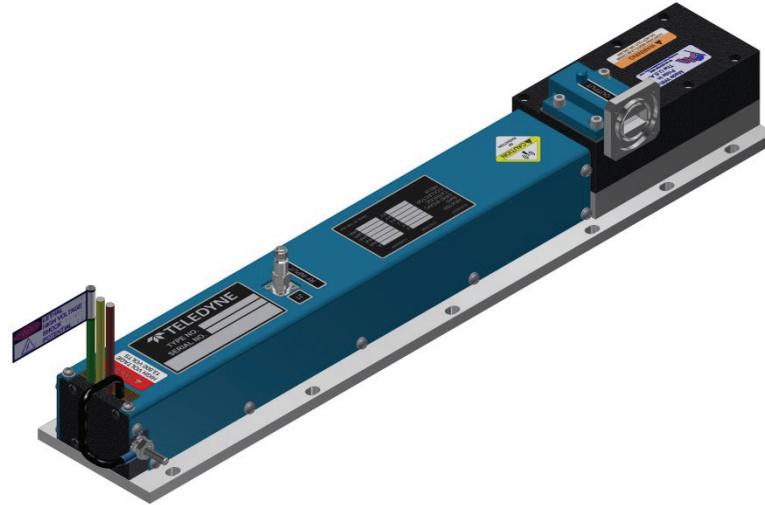


MTI 3056C

Pulse TWT

15.0 GHz – 17.0 GHz

- 2% Maximum Duty
- 3800 W Minimum Power
- 15.0 to 17.0 GHz
- -40° to 85° C
- 492 W Typ. Prime Power @2%
- 50-56 dB Typical Gain
- 16.78" L x 3.03" W x 3.0" H
(42.6 x 7.7 x 7.62 cm)



RF Performance

Freq (GHz)	Typ. Sat. Power Output (W)	Min. Spec. Power Output (W)	Typ. Gain @ Spec. Power (dB)
15.00	3800	3800*	50
15.25	3850	3800	52
15.50	3900	3800	50
15.75	4075	4000	51
16.00	4175	4000	50
16.25	4200	4000	53
16.50	4250	4000	54
16.75	4300	4000	55
17.00	4400	4000	56

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

Typical Operating Conditions

Element	Typical Operating Conditions		Power Supply Requirements		
	Voltage	Current	Voltage Min.	Voltage Max.	Current Max.
Heater	-6.3 Vdc	2 A	-6.0 Vdc	-6.6 Vdc	3.0 A
Helix					
with RF	Ground	400 mApk	Ground	Ground	500 mApk @ 2%
without RF	Ground	150 mApk	Ground	Ground	500 mApk @ 2%
Grid On	235 Vpk	2 mApk	130 Vpk	300 Vpk	30 mApk
Grid Off	-250 Vdc	0.005 mA	-250 Vdc	-500 Vdc	0.1 mA
Cathode (Ek)	-13.5 kV	1.65 Apk	-13 kV	-13.75 kV	3.0 Apk
Collector w/RF	Ground	1.1 Apk	Ground	Ground	1.6 Apk

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

Performance

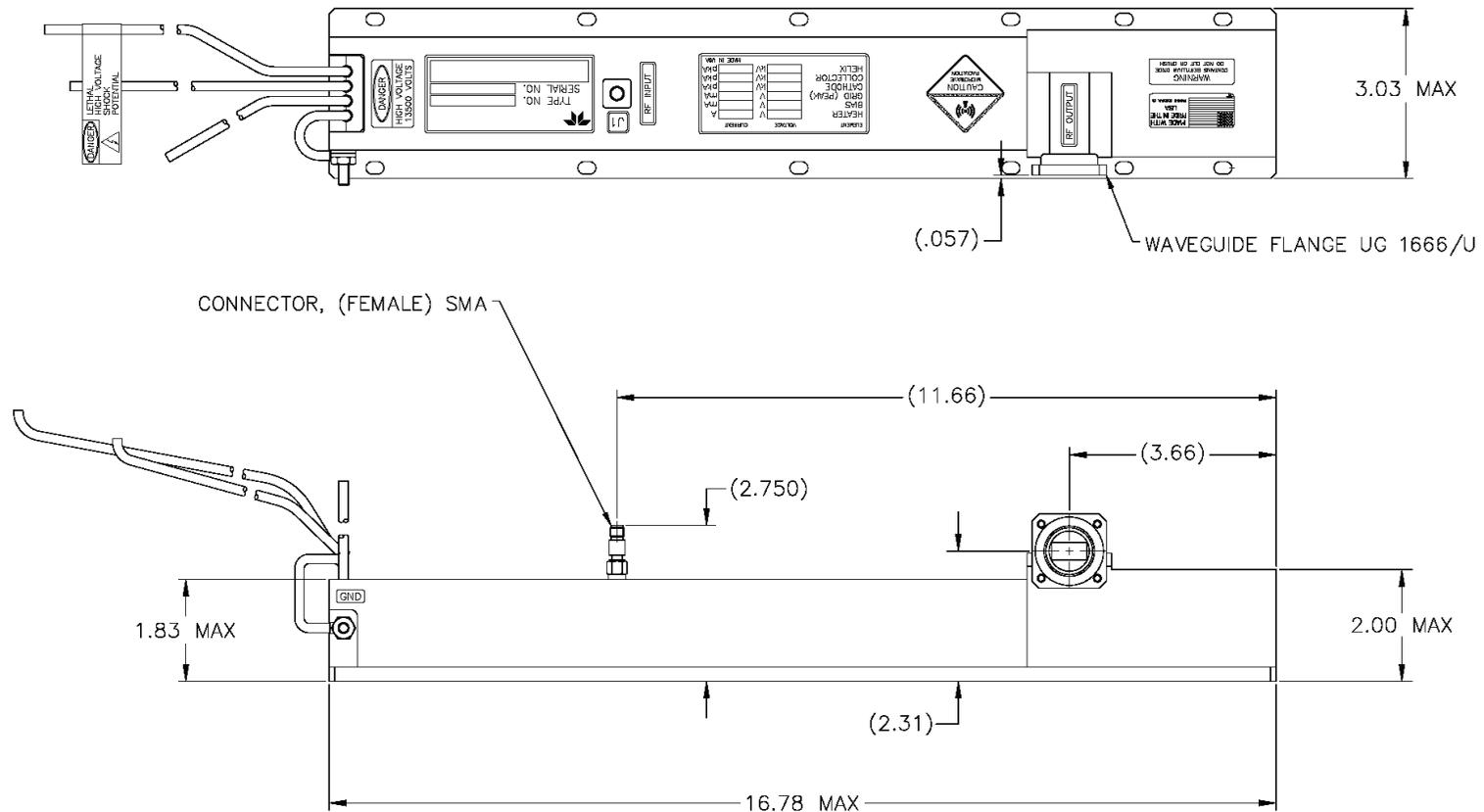
	Typical	Spec
Input VSWR.....	1.8:1	2:1
Output VSWR.....	1.8:1	2:1
Max. Duty	—	2%
Max. Pulsewidth	—	100 μs
Grid Capacitance.....	35 pF	50 pF
Min. Harmonic Separation.....	-20 dBc	-15 dBc*
Noise Power Density (dBm/MHz)	-13	-10
Prime Power.....	492 W	500 W

** Minimum harmonic separation applies to the minimum specified power output at the indicated frequency.*

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NOTES:

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



TELEDYNE MICROWAVE SOLUTIONS
TWT Products
11361 Sunrise Park Dr., Rancho Cordova, CA 95744 (916) 638-3344

TITLE
MTI 3056C

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