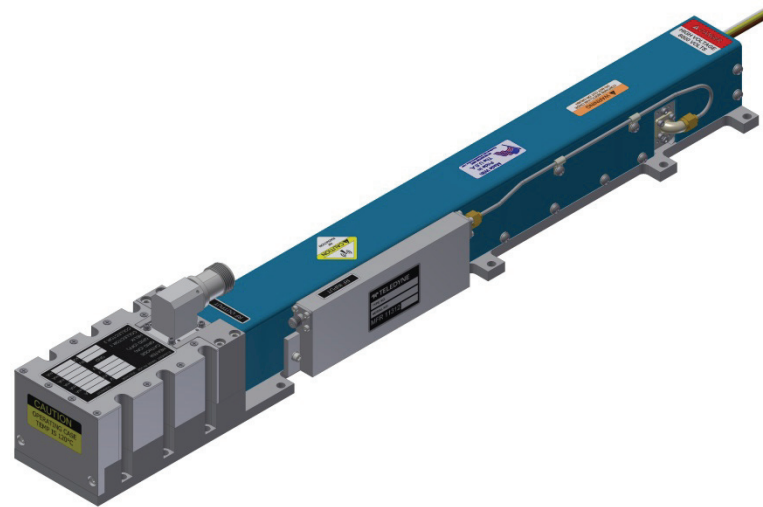


MTG 5082H

Continuous Wave TWT

2.5 GHz – 8.0 GHz

- 215 W Minimum Power
- 2.5 to 8.0 GHz
- -40° to 85° C
- 943 W Typ. Prime Power
- 40-64 dB Typical Gain
- 19.9" L x 2.52" W x 3.2" H (50.5 x 6.4 x 8.1 cm)
- Phase Match Available



RF Performance

Freq (GHz)	Typ. Sat. Power Output (W)	Min. Spec. Power Output (W)	Typ. Gain @ Spec. Power (dB)
2.5	230	220	42
3.0	280	275	55
4.0	280	275	62
5.0	280	275	64
6.0	280	275	55
7.0	250	234	48
8.0	250	215	40

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 Vdc	-6.6 Vdc	2.5 A
Helix					
with RF	Ground	37 mA	Ground	Ground	45 mA
without RF	Ground	5 mA	Ground	Ground	45 mA
Grid On	114 Vdc	0.25 mA	75 Vdc	130 Vdc	10 mA
Grid Off	-200 Vdc	0.01 mA	-200 Vdc	-500 Vdc	0.1 mA
Cathode (E _k)	-5 kV	320 mA	-4.75 kV	-5.2 kV	400 mA
Collector w/RF					
Coll. #1	3.25 kV	138 mA	65% x E _k ±2%		200 mA
Coll. #2	2.05 kV	145 mA	41% x E _k ±2%		400 mA

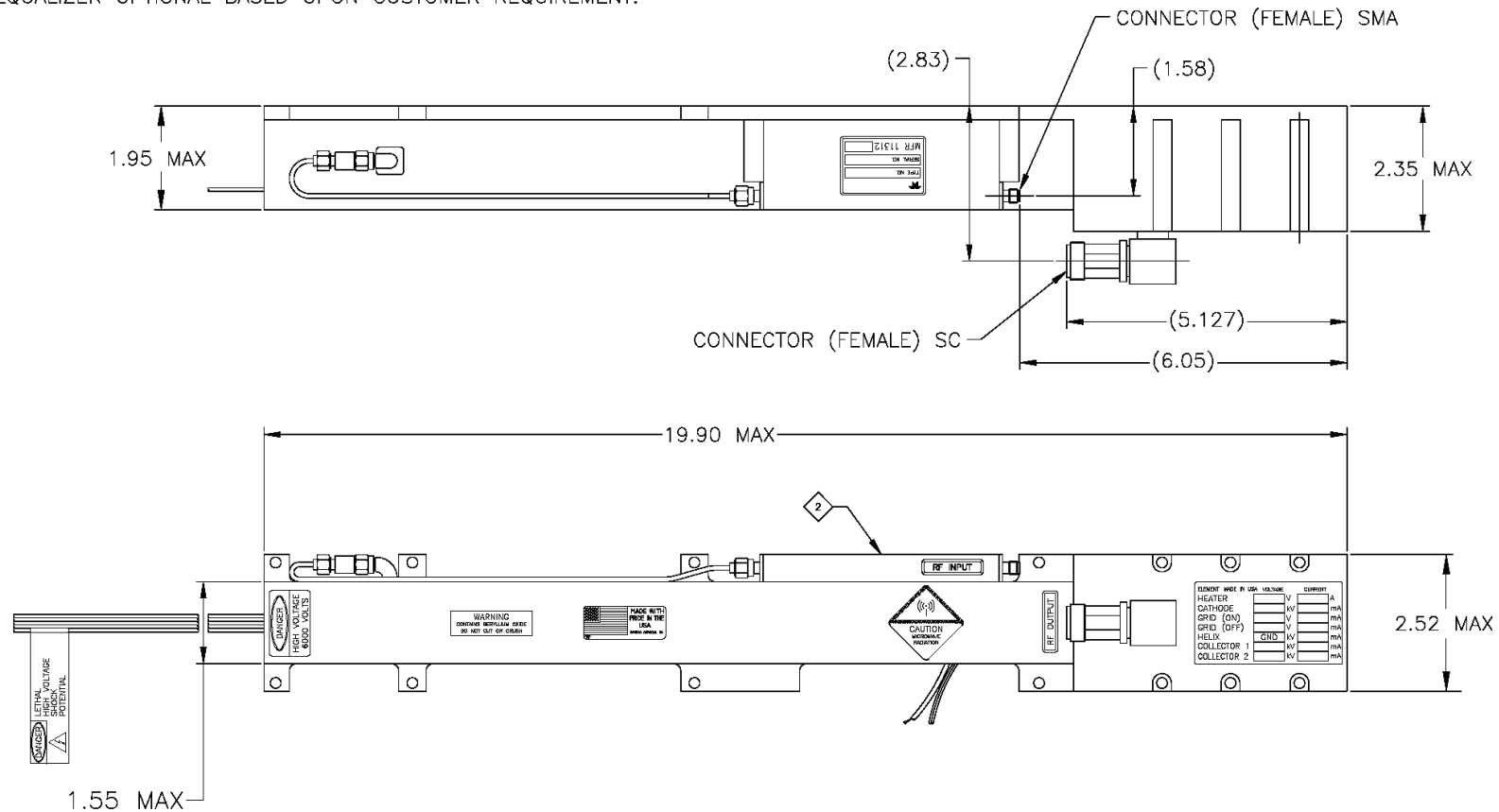
Cathode voltage is measured with respect to ground.
Heater, Collector, and Grid voltages are measured with respect to Cathode.

Performance	Typical	Spec
Input VSWR.....	2:1	2.5:1
Output VSWR.....	2:1	2.5:1
Max. Duty	—	CW
Grid Capacitance.....	47 pF	50 pF
Min. Harmonic Separation.....	-2.5 dBc	-2 dBc
Noise Power Density (dBm/MHz)	-12	-9
Prime Power.....	943 W	1085 W

This model number is subject to the jurisdiction of the U.S. Department of Commerce.

NOTES:

1. THERMOSTAT OPTIONS: N/C OR N/O
- ② EQUALIZER OPTIONAL BASED UPON CUSTOMER REQUIREMENT.



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

TITLE
MTG 5082H

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

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Teledyne TWT Products • 11361 Sunrise Park Drive • Rancho Cordova, CA 95742 • 916.638.3344 • www.teledynemicrowave.com

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