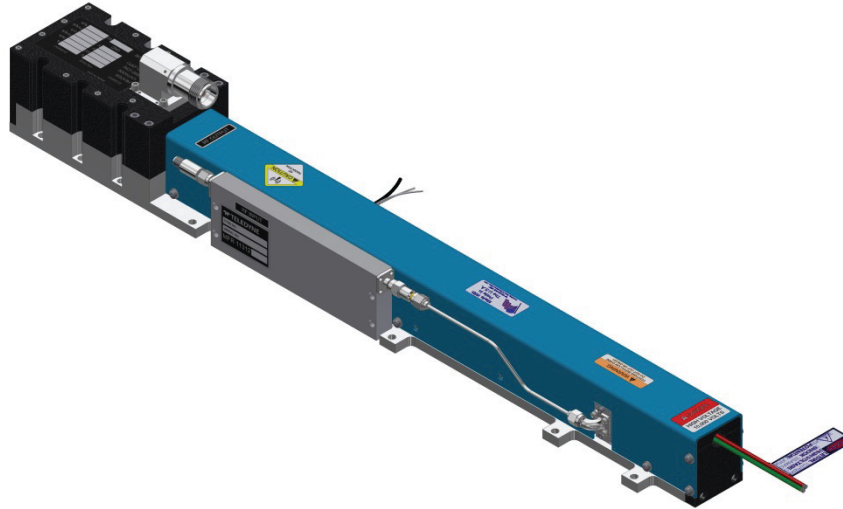


MTG 3041L2

Pulse TWT

2.0 GHz – 8.0 GHz

- 6% Maximum Duty
- 2 kW Minimum Power
- 2.0 to 8.0 GHz
- -40° to 85° C
- 725 W Typ. Prime Power @6%
- 38-58 dB Typical Gain
- 21.25" L x 2.55" W x 3.25" H
(54 x 6.5 x 8.3 cm)



RF Performance

Freq (GHz)	Typ. Sat. Power Output (W)	Min. Spec. Power Output (W)	Typ. Gain @ Spec. Power (dB)
2.0	2040	2000*	38
2.2	2040	2000	38
2.3	2300	2000**	39
2.5	2400	2000	40
2.6	2500	2000***	44
3.0	2500	2000	50
4.0	2500	2000	57
5.0	2500	2000	58
6.0	2500	2000	55
7.0	2350	2000	50
7.5	2300	2000	48
8.0	2040	2000	44

Typical power output is shown to illustrate capability. Typical gain shown is with equalizer and limiter (for harmonic injection).

Typical Operating Conditions

Element	Typical Operating Conditions		Power Supply Requirements		
	Voltage	Current	Voltage Min.	Voltage Max.	Current Max.
Heater	-6.3 Vdc	2.2 A	-6.1 Vdc	-6.5 Vdc	3.0 A
Helix					
with RF	Ground	650 mApk	Ground	Ground	700 mApk @ 6%
without RF	Ground	150 mApk	Ground	Ground	700 mApk @ 6%
Grid On	217 Vpk	1.8 mApk	100 Vpk	250 Vpk	20 mApk
Grid Off	-250 Vdc	0.01 mA	-250 Vdc	-500 Vdc	0.1 mA
Cathode (Ek)	-8.5 kV	1.65 Apk	-8.2 kV	-8.8 kV	1.8 Apk
Collector w/RF	6.38 kV	1 Apk		75% 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

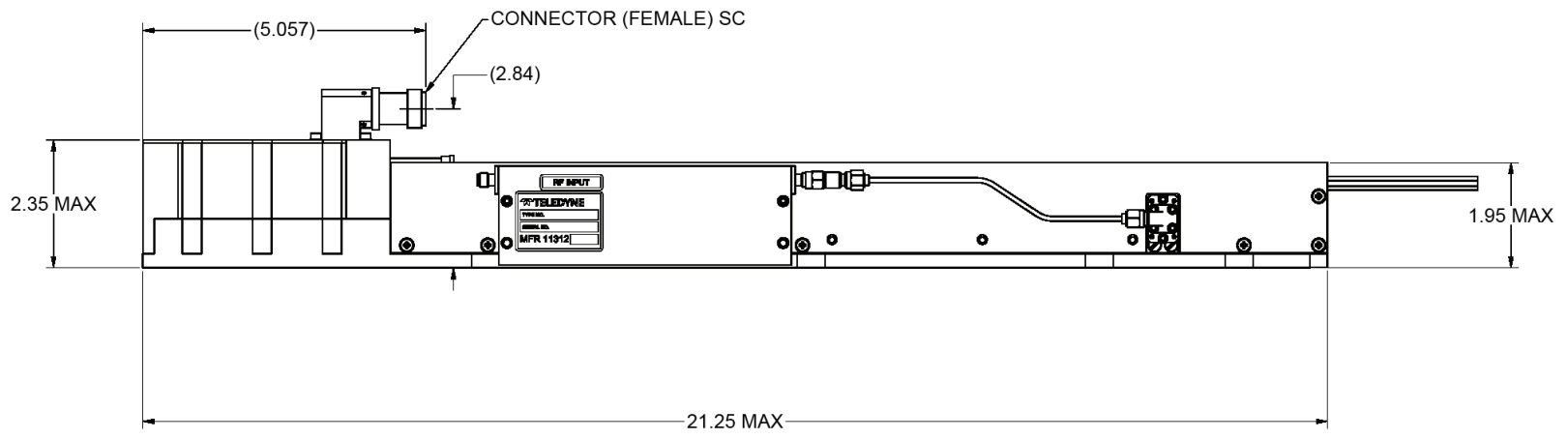
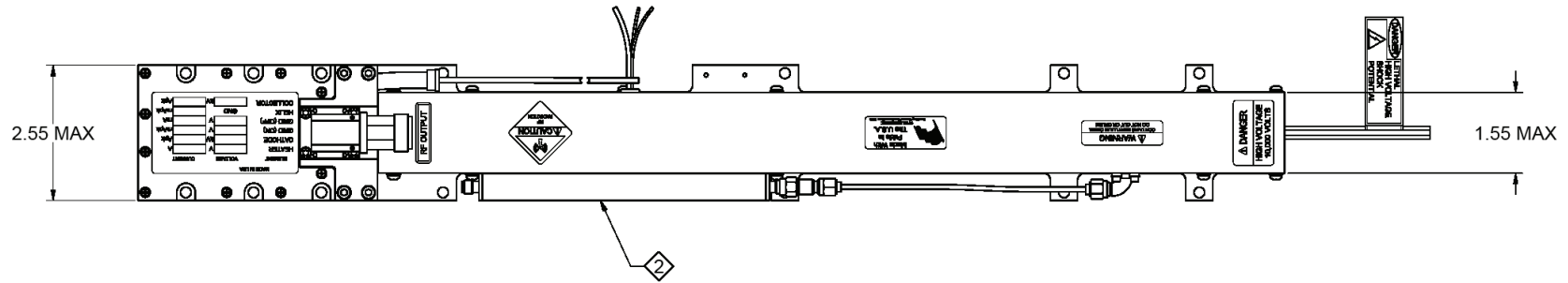
	Typical	Spec
Input VSWR.....	3.5:1	3.5:1
Output VSWR.....	1.8:1	2.5:1
Max. Duty	—	6%
Max. Pulsewidth	—	100 μs
Grid Capacitance.....	47 pF	50 pF
Min. Harmonic Separation (dBc).....	3.5/0/-2.5...4.5*/1.5**/-1***	
Noise Power Density (dBm/MHz)	-12	-10
Prime Power.....	725 W	800 W

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

② EQUALIZER OPTIONAL BASED UPON CUSTOMER REQUIREMENT.



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
MTG 3041L2/MTG 3041K

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