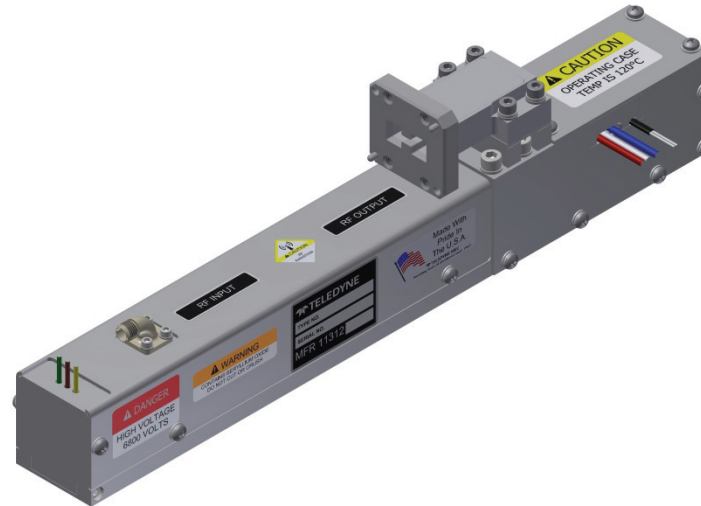


MEC 5508

Continuous Wave TWT

6.0 GHz – 18.0 GHz

- 150 W Minimum Power
- 6.0 to 18.0 GHz
- -40° to 85° C
- 840 W Typ. Prime Power
- 26-27.5 dB Typical Gain
- 11.05" L x 1.47" W x 2.8" H
(28.1 x 3.73 x 7.2 cm)



Typical Operating Conditions			Power Supply Requirements		
Element	Voltage	Current	Voltage Min.	Voltage Max.	Current Max.
Heater	-6.1 Vdc	0.54 A	-6.0 Vdc	-6.6 Vdc	1.0 A
Helix					
with RF	Ground	12 mA _{pk}	Ground	Ground	15 mA
without RF	Ground	3 mA _{pk}	Ground	Ground	15 mA
FE Drive	-25 V	0.1 mA	-10 Vdc	-60 V	1.0 mA
FE Bias	-1600 Vdc	0.1 mA	-1500 Vdc	-1700 Vdc	1.0 mA
Cathode (E _k)	-6.7 kV	250 mA	-6.2 kV	-7.2 kV	270 mA
Collector w/RF					
Coll. #1	5.03 kV	42 mA	75% x E _k ±2%		100 mA
Coll. #2	3.35 kV	112 mA	50% x E _k ±2%		200 mA
Coll. #3	1.88 kV	84 mA	28% x E _k ±2%		250 mA

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

RF Performance

Freq (GHz)	Typ. Sat. Power Output (W)	Min. Spec. Power Output (W)	Typ. Gain @ Spec. Power (dB)
6.0	180	150	26
7.0	250	200	27
9.0	255	200	27
11.0	260	200	27
12.0	270	200	27.5
13.0	250	200	27
14.0	250	200	27
15.0	260	200	27
16.0	255	200	27
17.0	230	200	26.5
18.0	220	200	26

Typical power output is shown to illustrate capability.
Typical gain shown is with equalizer.

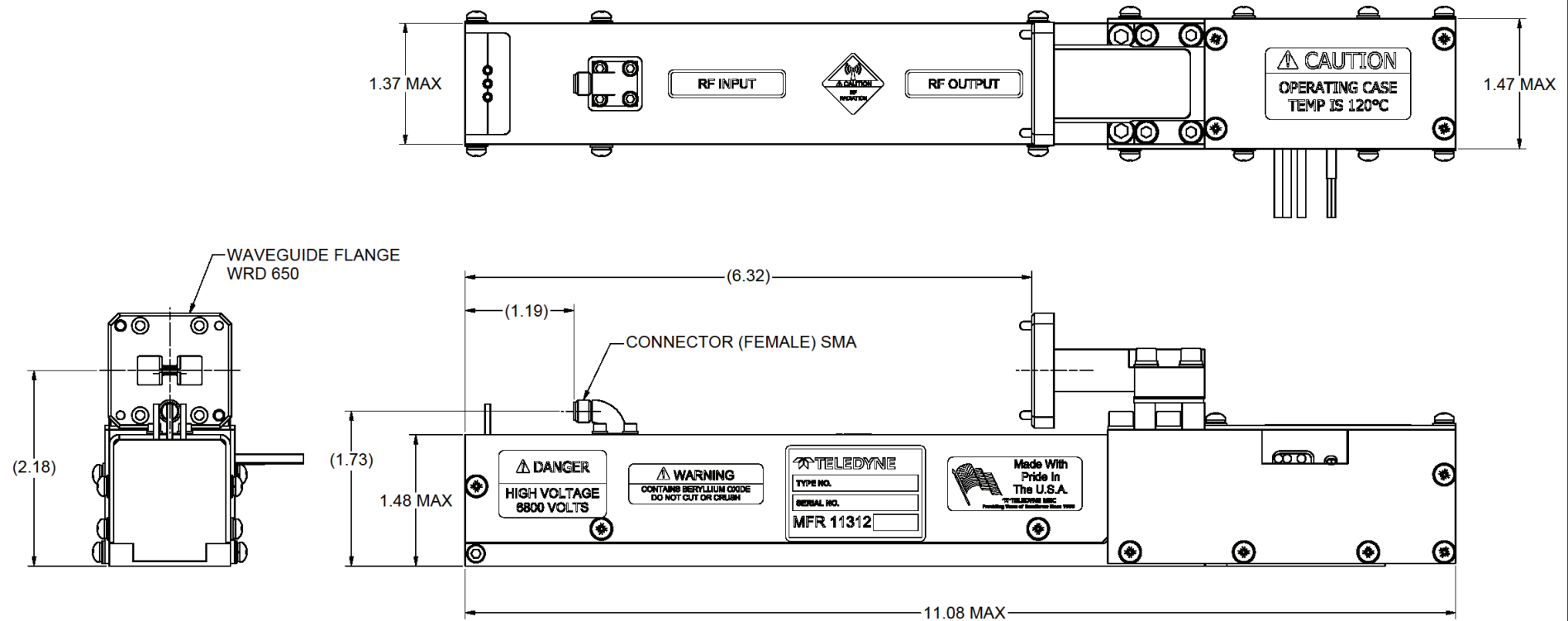
Performance	Typical	Spec
Input VSWR.....	2:1	2.5:1
Output VSWR.....	1.75:1	2.25:1
Max. Duty	—	CW
FE Capacitance	24 pF	35 pF
Min. Harmonic Separation (at 6.0 GHz).....	-3.5 dBc	-3 dBc
Noise Power Density (dBm/MHz)	-35	-26
Prime Power.....	840 W	1000 W

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.

Published Information – Cleared for Public Release by the DoD's Office of Security Review, Case 13-S-1283.

NOTES:

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



TELEDYNE MICROWAVE SOLUTIONS TWT PRODUCTS 11361 Sunrise Park Dr., Rancho Cordova, CA (916) 638-3344
TITLE
MEC 5508

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

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.

Published Information – Cleared for Public Release by the DoD's Office of Security Review, Case 13-S-1283.



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

6.0 GHz – 18.0 GHz Continuous Wave TWT • MEC 5508