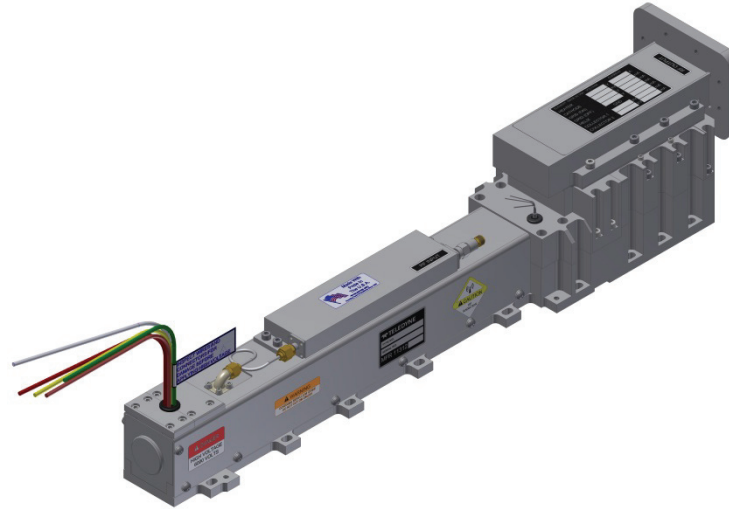


MEC 5498

Continuous Wave TWT

2.5 GHz – 7.5 GHz

- 535 W Minimum Power
- 2.5 to 7.5 GHz
- -40° to 85° C
- 1995 W Typ. Prime Power
- 26-43 dB Typical Gain
- 17.5" L x 3.25" W x 4.55" H (44.5 x 8.25 x 11.6 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	550	535	26
3.0	775	535	38
3.5	825	535	40
4.0	775	535	42
4.5	750	535	43
5.0	750	535	43
5.5	700	535	42
6.0	675	535	40
6.5	675	535	38
7.0	635	535	34
7.5	550	535	31

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	2.1 A	-6 Vdc	-6.5 Vdc	2.5 A
Helix					
with RF	Ground	35 mA	Ground	Ground	50 mA
without RF	Ground	5 mA	Ground	Ground	50 mA
Grid On	165 Vdc	0.2 mA	100 Vdc	250 Vdc	5 mA
Grid Off	-200 Vdc	0.05 mA	-200 Vdc	-500 Vdc	0.5 mA
Cathode (E _k)	-6.15 kV	500 mA	-5.8 kV	-6.5 kV	550 mA
Collector w/RF					
Coll. #1	4.31 kV	300 mA	70% x E _k ±2%		450 mA
Coll. #2	2.89 kV	165 mA	47% x E _k ±2%		550 mA

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

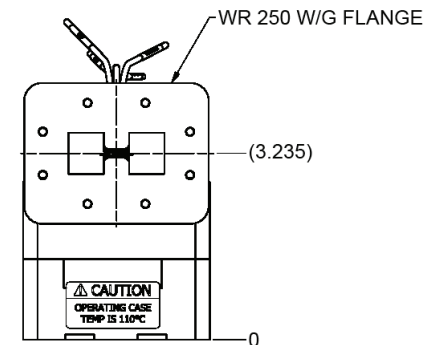
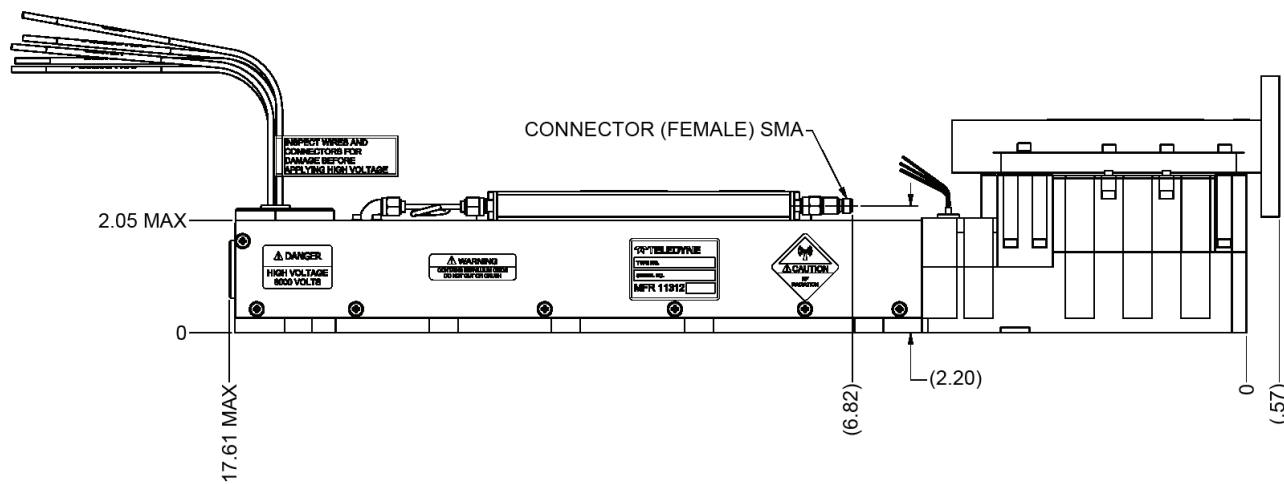
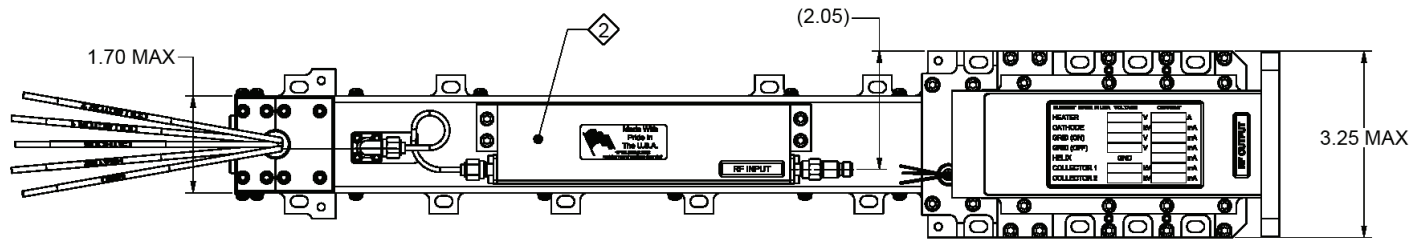
Performance

	Typical	Spec
Input VSWR.....	2:1	2.5:1
Output VSWR.....	2.2:1	2.5:1
Max. Duty	—	CW
Grid Capacitance.....	40 pF	60 pF
Min. Harmonic Separation.....	-5 dBc	-3 dBc
Noise Power Density (dBm/MHz)	-40	-25
Prime Power.....	1995 W	2500 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.



SUBJECT TO CHANGE W/O NOTICE

ISO 9001:2008 Registered

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

TITLE

MEC 5498

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



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

2.5 GHz – 7.5 GHz Continuous Wave TWT • MEC 5498