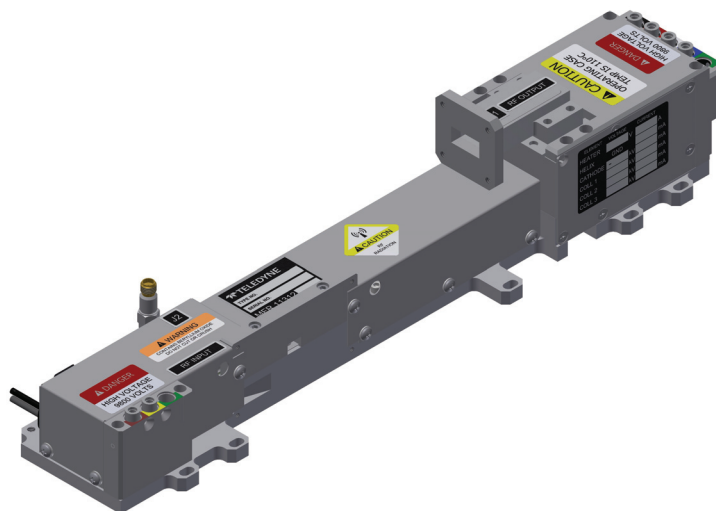


MEC 5517

Communication TWT

13.75 to 14.5 GHz

- 530 W_{pk} Saturated Power
- 295 W CW Minimum Power
- 265 W Linear Power Minimum (Linearized)
- 13.75 to 14.5 GHz
- -40° to 85° C
- 860 W Typical Prime Power
- 50 dB Typical Gain @ CW
- 13.4" L x 2.78" W x 2.86" H (34 x 7.0 x 7.26 cm)
- Weight 4.5 lbs.



RF Performance

Freq (GHz)	Typical CW Power Output (W)	Min. Spec. CW Power Output (W)	Typ. Gain @ Spec. Power (dB)
13.75	338	295	50
13.90	325	295	50
14.00	325	295	50
14.25	305	295	49
14.5	315	295	48

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	1.36 A	-5.8 Vdc	-6.6 Vdc	1.5 A
Helix					
with RF	Ground	6.0 mA	Ground	Ground	10 mA
without RF	Ground	2.0 mA	Ground	Ground	10 mA
FE On*	-6.3 Vdc	0.1 mA	@ Heater	@ Heater	3 mA
Cathode (Ek)	-9.4 kV	303 mA	-9.0kV	-10.5 kV	315 mA
Collector w/RF					
Coll. #1	4.03 kV	37.0 mA	42.9% x Ek ±2%		90 mA
Coll. #2	3.45 kV	142.0 mA	36.7% x Ek ±2%		185 mA
Coll. #3	1.34 kV	118.0 mA	14.3% x Ek ±2%		320 mA

*FE tied to heater internally for bias

Cathode voltage is measured with respect to ground.

Heater, Collector, and Focus Electrode (FE) voltages are measured with respect to Cathode.

Performance

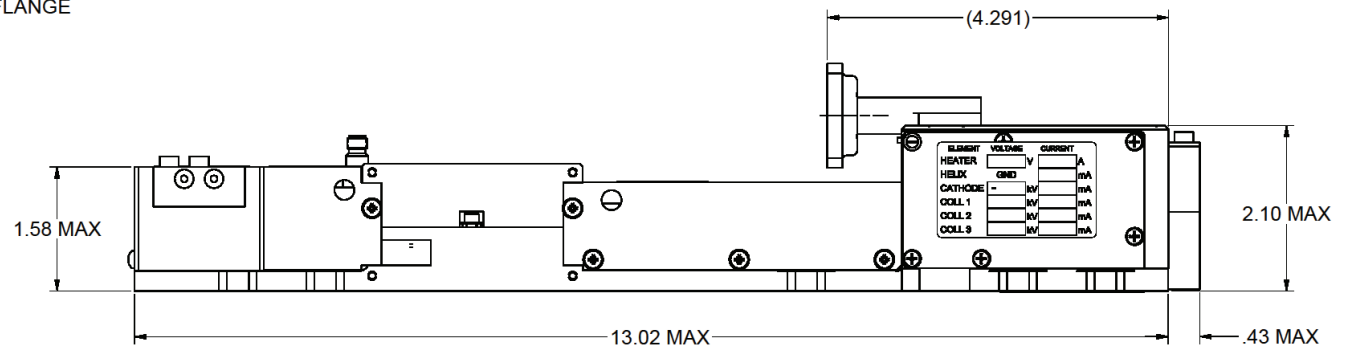
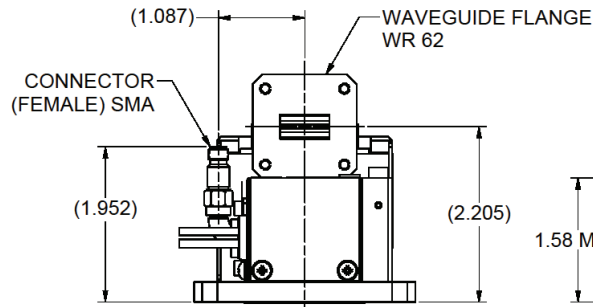
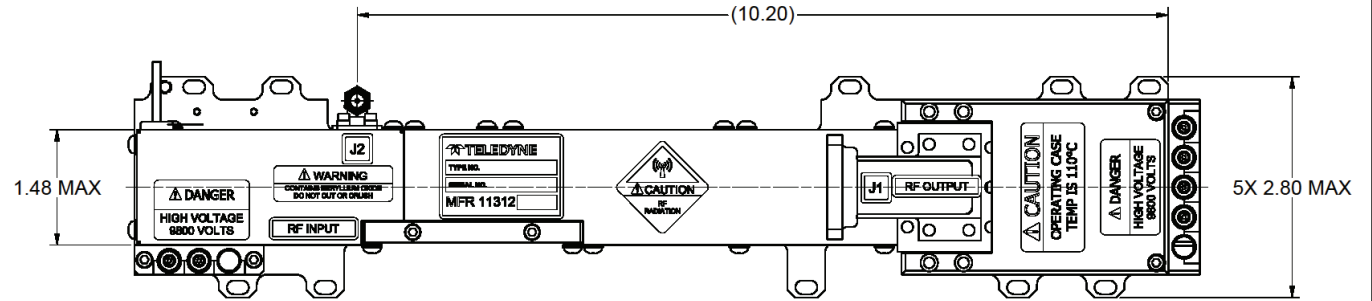
	Typical	Spec
Input VSWR:.....	1.6:1	2.0:1
Output VSWR:.....	1.7:1	2.0:1
Max. Duty	-	CW
FE Capacitance	50 pF	65 pF
Noise Power Density (dBm/MHz)	-25	-21
Prime Power @ Linear	860 W	930 W

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.

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NOTES:

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



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	MEC 5517

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