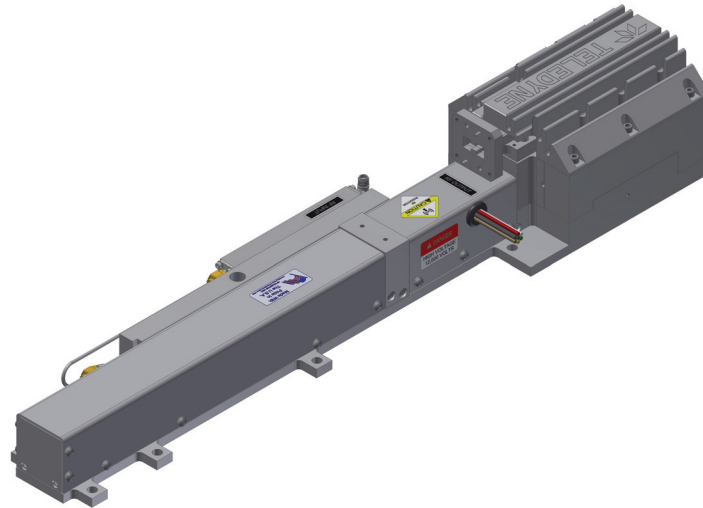


MEC 5519

Continuous Wave TWT

11 GHz – 18 GHz

- 500 W Minimum Power
- 11.0 to 18.0 GHz
- -40° to 85° C
- 2000 W Typ. Prime Power
- 54 dB Typical Gain
- 19.8" L x 3.9" W x 3.33" H (50.3 x 9.9 x 8.45 cm)



RF Performance

Freq (GHz)	Typ. Sat. Power Output (W)	Min. Spec. Power Output (W)	Typ. Gain @ Spec. Power (dB)
11.0	550	500	55
12.0	560	500	54
13.0	560	500	54
14.0	560	500	54
15.0	560	500	54
16.0	570	500	55
17.0	575	500	55
17.5	575	500	55
18.0	520	450	53

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

Typical Operating Conditions Element	Voltage	Current	Power Supply Requirements		
			Voltage Min.	Voltage Max.	Current Max.
Heater	-6.0 Vdc	1.67 A	-5.8 Vdc	-6.6 Vdc	2.0 A
Helix					
with RF	Ground	2 mA	Ground	Ground	10 mA
without RF	Ground	7 mA	Ground	Ground	10 mA
FE On*	-6.0Vdc	0 mA	@ Heater	@Heater	3 mA
Cathode (Ek)	-12.35 kV	420 mA	-12 kV	-13.5 kV	425 mA
Collector w/RF					
Coll. #1	6.06 kV	176 mA	49% x Ek ±2%		250 mA
Coll. #2	3.34 kV	237 mA	27% x Ek ±2%		420 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.

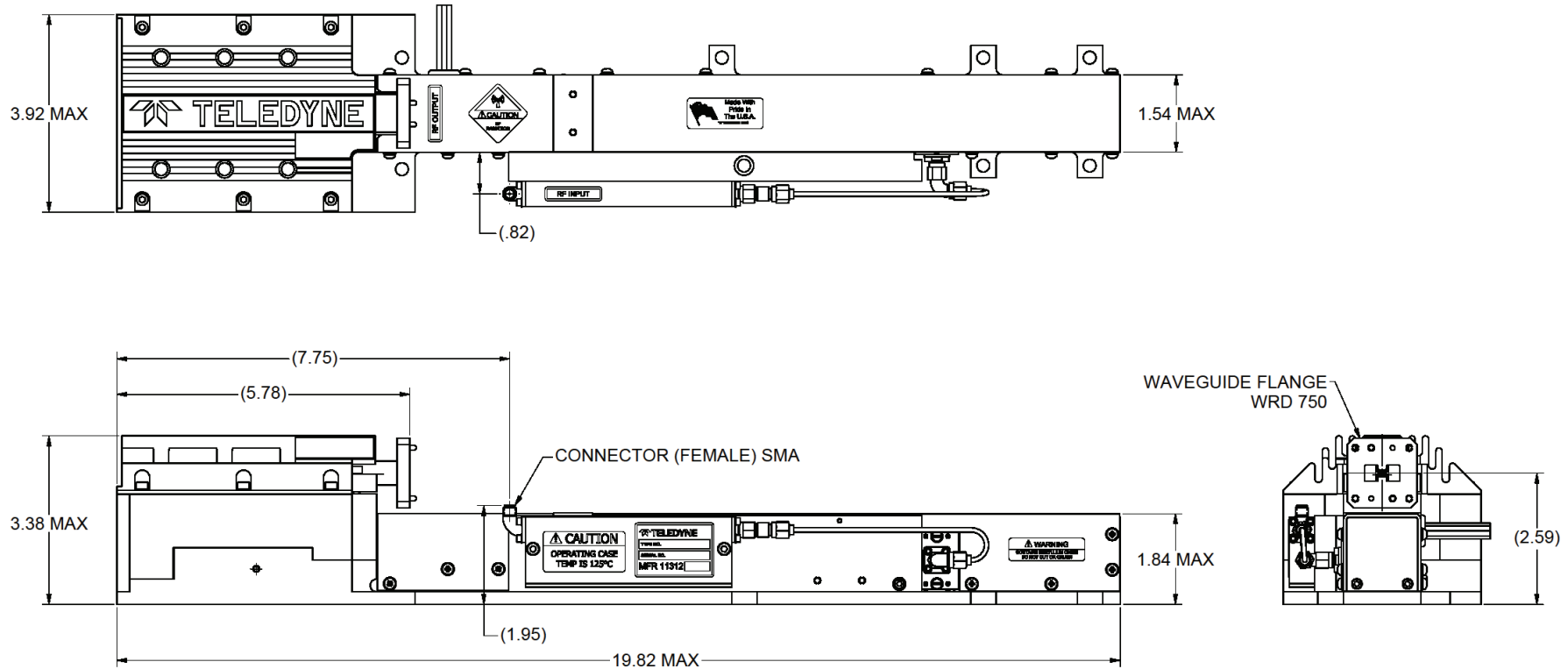
Performance	Typical	Spec
Input VSWR:.....	1.93:1	2.25:1
Output VSWR:.....	1.75:1	1.80:1
Max. Duty:.....	--	CW
FE Capacitance.....	50 pF	65 pF
Min. Harmonic Separation.....	-15 dBc	-10 dBc
Noise Power Density (dBm/MHz):.....	-12	-10
Prime Power	2000 W	2200 W

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
11361 Sunrise Park Dr., Rancho Cordova, CA (916) 638-3344

TITLE

MEC 5519

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