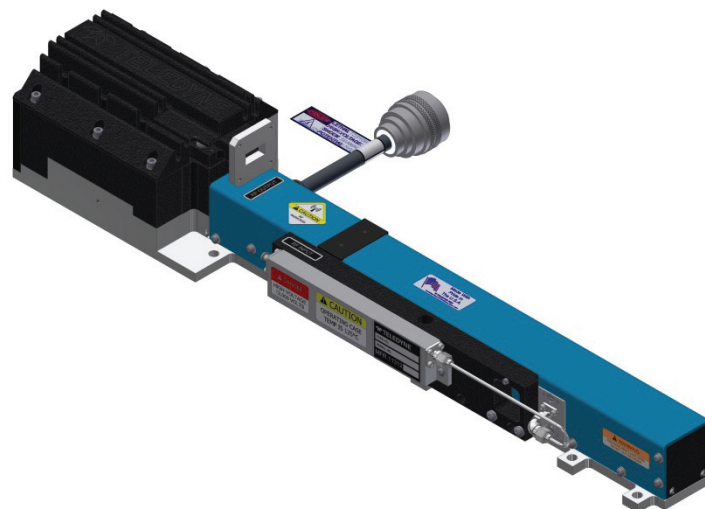


MEC 3086

Pulse TWT

15.50 GHz – 17.90 GHz

- 40% Duty Cycle
- 700 W Minimum Power
- 15.50 to 17.90 GHz
- -40° to 85° C
- 45-48 dB Typical Gain
- 19.8" L x 3.9" W x 3.4" H
(50.3 x 9.9 x 8.6 cm)
- ±20° Phase Match



RF Performance

Freq (GHz)	Typ. Sat. Power Output (W)	Min. Spec. Power Output (W)	Typ. Gain @ Spec. Power (dB)
15.50	710	700	45
16.10	725	700	47
16.70	725	700	48
17.30	725	700	47
17.90	710	700	47

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	-6.3 Vdc	1.70 A	-5.8 Vdc	-6.6 Vdc	2.5 A
Helix					
with RF	Ground	7.0 mApk	Ground	Ground	20 mApk
without RF	Ground	3.3 mApk	Ground	Ground	20 mApk
Grid Drive	195 Vpk	0 mApk	150 Vpk	275 Vpk	20 mApk
Grid Bias Off	-350 Vdc	0 mA	-300 Vdc	-500 Vdc	1.0 mA
Cathode (Ek)	-12.2 kV	416 mApk	-12 kV	-13 kV	480 mApk
Collector					
Coll. #1	7.2 kV	85.0 mApk (w/RF) 6.0 mApk(w/o RF)	59% x Ek ±2%		200 mApk
Coll. #2	5.0 kV	324 mApk (w/RF) 406 mApk(w/o RF)	41% x Ek ±2%		480 mApk

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

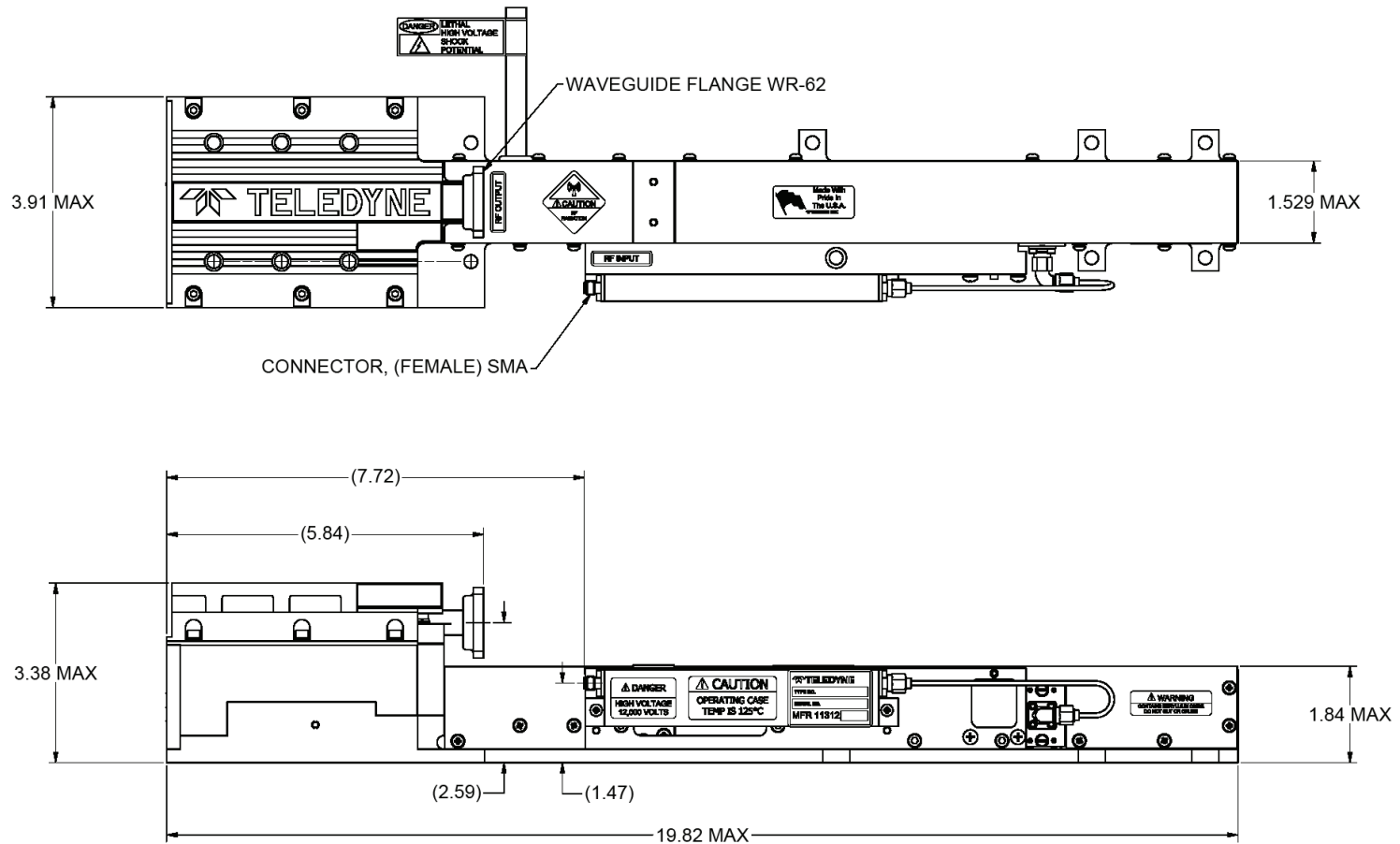
Performance

	Typical	Spec
Input VSWR.....	1.90:1	2.0:1
Output VSWR.....	1.47:1	2.0:1
Duty Cycle	40%	40%
Noise Power Density (dBm/MHz)	>-105	-105
Spurious	>-50 dBc	-50 dBc
Prime Power.....	938 W	1200 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



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 3086

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