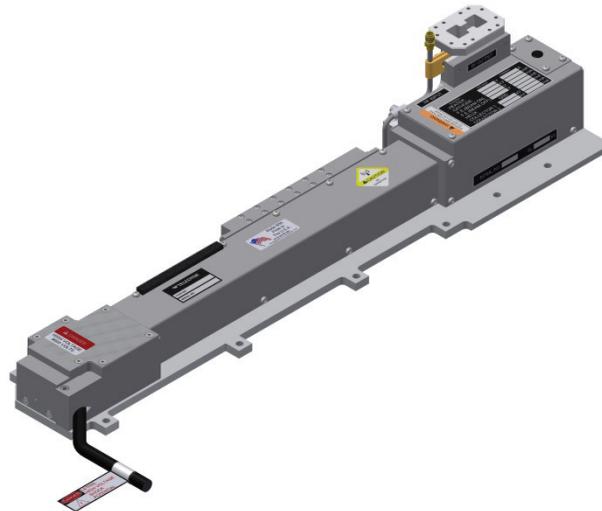


MTG 5130

Continuous Wave TWT

5 GHz – 11 GHz

- 300 W Minimum Power
- 5 to 11 GHz
- -40° to 85° C
- 1655 W Typ. Prime Power
- 38-57 dB Typical Gain
- 19.5" L x 4.14" W x 3.82" H
(49.6 x 10.5 x 9.7 cm)



Typical Operating Conditions			Power Supply Requirements		
Element	Voltage	Current	Voltage Min.	Voltage Max.	Current Max.
Heater	-6.3 Vdc	1.7 A	-6.1 Vdc	-6.5 Vdc	2.7 A
Helix					
with RF	Ground	25 mA	Ground	Ground	30 mA
without RF	Ground	6 mA	Ground	Ground	30 mA
FE On	-3 Vdc	0	0	-50 Vdc	0.1 mA
FE Off	-1200 Vdc	0	-1200 Vdc	-1500 Vdc	1 mA
Cathode (E _k)	-9.05 kV	430 mA	-8.5 kV	-9.6 kV	475 mA
Collector w/RF					
Coll. #1	4.7 kV	105 mA	52% x E _k ±2%		250 mA
Coll. #2	3.08 kV	300 mA	34% x E _k ±2%		450 mA

Cathode voltage is measured with respect to ground.
Heater, Collector, and Focus Electrode (FE) 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)
5.0	400	300	56
5.5	450	300	56
6.0	415	400	53
6.5	500	450	56
7.0	589	500	57
7.5	589	500	56
8.0	646	500	55
8.5	646	500	54
9.0	617	500	51
9.5	537	500	47
10.0	550	500	45
10.5	550	400	43
11.0	450	400	38

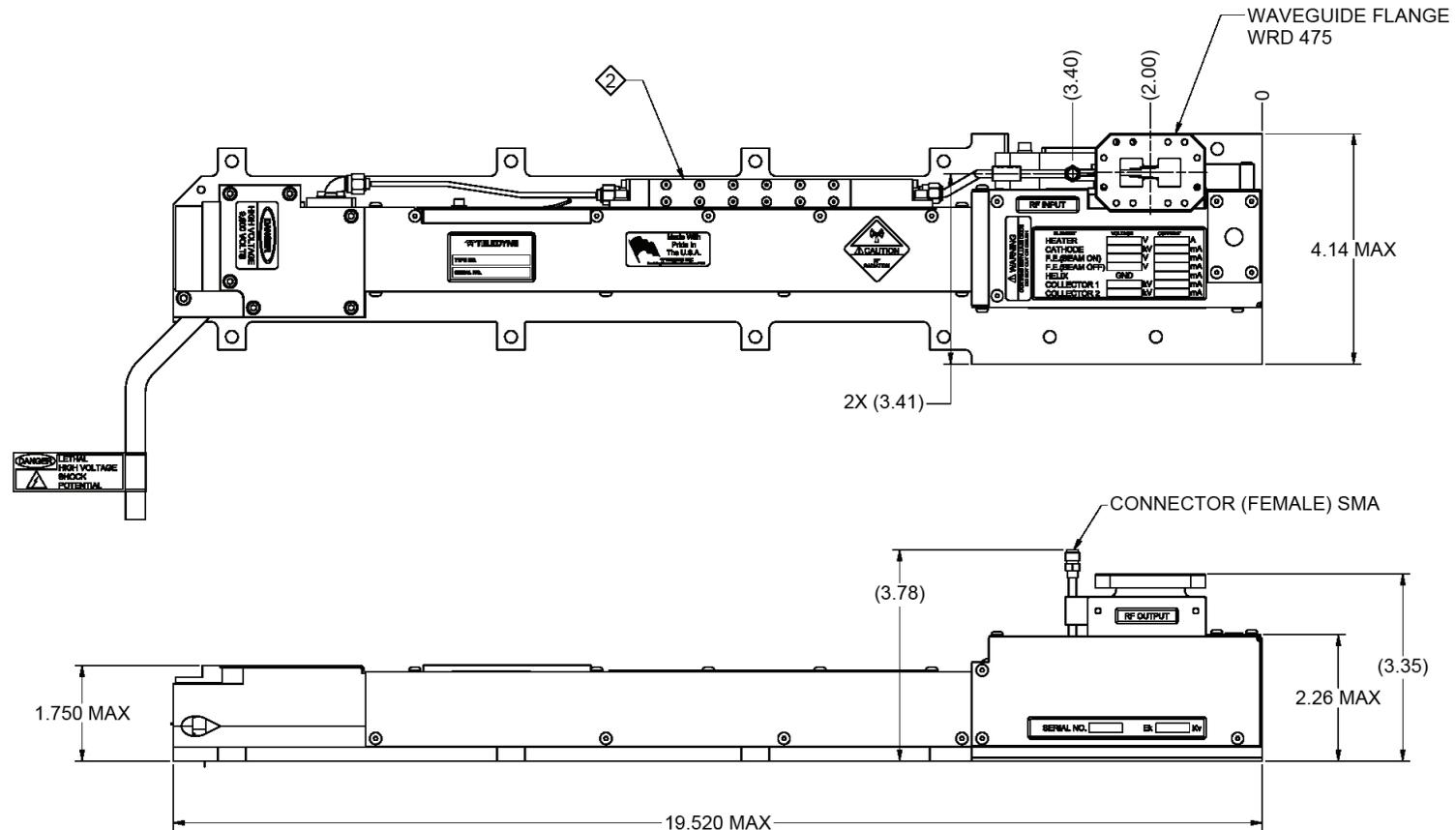
Typical power output is shown to illustrate capability.
Typical gain shown is without equalizer.

Performance	Typical	Spec
Input VSWR.....	2:1	2.5:1
Output VSWR.....	1.8:1	2.5:1
Max. Duty	—	CW
FE Capacitance.....	40 pF	50 pF
Min. Harmonic Separation.....	-6 dBc	-4 dBc
Noise Power Density (dBm/MHz)	-20	-18
Prime Power	1655 W	2000 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
- ② EQUALIZER OPTIONAL BASED UPON CUSTOMER REQUIREMENT.



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

TITLE
MTG 5130

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

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