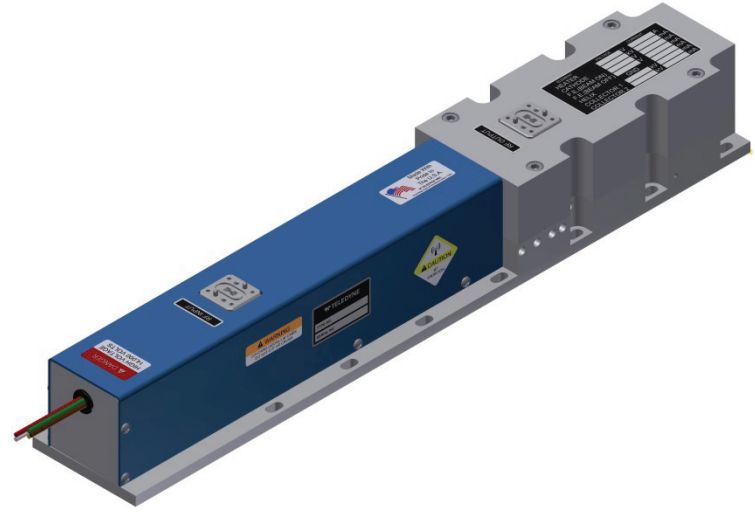
MEC 5496
Continuous Wave TWT
26.5 GHz – 40 GHz

- 40 W Minimum Power
- 26.5 to 40 GHz
- -40° to 85° C
- 400 W Typ. Prime Power
- 35-50 dB Typical Gain
- 16.45” L x 2.76” W x 2.35” H (41.8 x 7 x 6 cm)



RF Performance

Freq (GHz)	Typ. Sat. Power Output (W)	Min. Spec. Power Output (W)	Typ. Gain @ Spec. Power (dB)
26.5	40	40	45
27.0	40	40	46
28.0	40	40	47
29.0	50	40	48
30.0	50	40	50
31.0	50	40	50
32.0	50	40	50
33.0	60	40	50
34.0	70	40	50
35.0	65	40	50
36.0	60	40	50
37.0	55	40	42
38.0	45	40	38
39.0	40	40	36
40.0	40	40	35

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	0.7 A	-5.8 Vdc	-6.4 Vdc	1.5 A
Helix					
with RF	Ground	2 mA	Ground	Ground	4 mA
without RF	Ground	0.5 mA	Ground	Ground	4 mA
FE On	-6.3 Vdc	0.1 mA	0	-40 Vdc	1 mA
FE Off	-1200 Vdc	0.1 mA	-1200 Vdc	-1500 Vdc	0.2 mA
Cathode (E_k)	-13.5 kV	100 mA	-12.8 kV	-13.8 kV	110 mA
Collector w/RF					
Coll. #1	6.75 kV	10 mA	50% x E_k ±2%		50 mA
Coll. #2	3.38 kV	80 mA	25% x E_k ±2%		110 mA

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	2:1	2.5:1
Output VSWR	2:1	2:1
Max. Duty	—	CW
FE Capacitance	50 pF	60 pF
Min. Harmonic Separation	-8 dBc	-6 dBc
Noise Power Density (dBm/MHz)	-25	-20
Prime Power	400 W	500 W

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

TELEDYNE MICROWAVE SOLUTIONS
Everywhereyoulook™

Specifications are subject to change without notice.

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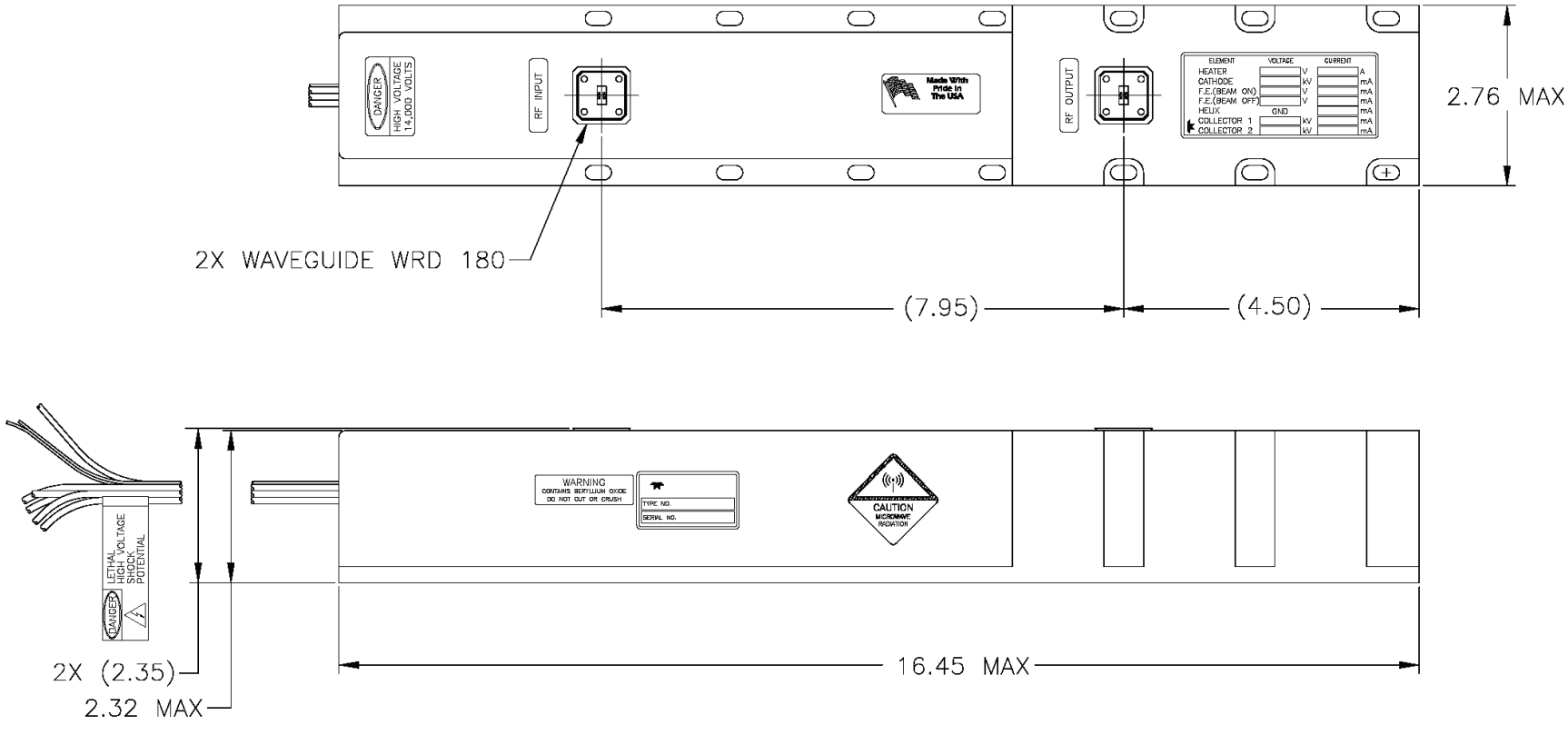
NOTES:

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



TELEDYNE MICROWAVE SOLUTIONS
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TITLE

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