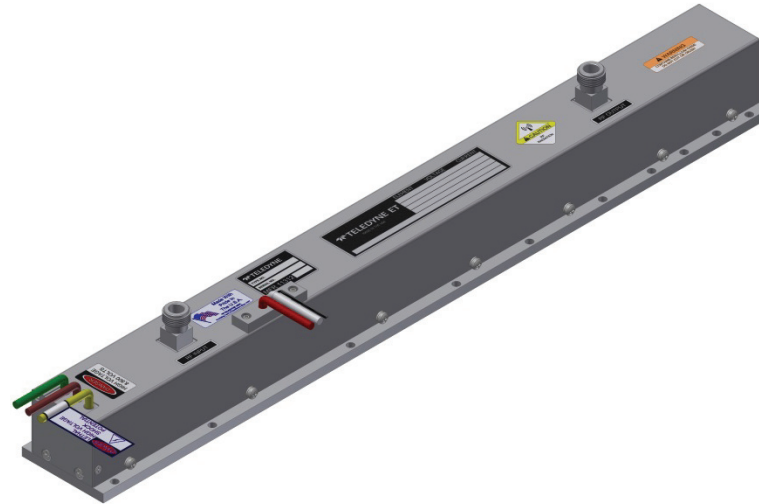


M5889NO/MEC 5889

Continuous Wave TWT

4.0 GHz – 8.0 GHz

- 250 W Minimum Power
- 4.0 to 8.0 GHz
- -40° to 85° C
- 1300 W Typ. Prime Power
- 46-59 dB Typical Gain
- 20.6" L x 2.52" W x 2.8" H (52.2 x 6.4 x 7.1 cm)
- Phase Match Available



RF Performance

Freq (GHz)	Typ. Sat. Power Output (W)	Min. Spec. Power Output (W)	Typ. Gain @ Spec. Power (dB)
4.0	260	250	48
4.5	320	250	54
5.0	370	250	57
5.5	395	250	59
6.0	395	250	59
6.5	385	250	57
7.0	370	250	54
7.5	360	250	50
8.0	285	250	46

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

Typical Operating Conditions			Power Supply Requirements		
Element	Voltage	Current	Voltage Min.	Voltage Max.	Current Max.
Heater	-6.3 Vdc	2.3 A	-6 Vdc	-6.6 Vdc	3.5 A
Helix					
with RF	Ground	6 mA	Ground	Ground	12 mA
without RF	Ground	2 mA	Ground	Ground	12 mA
Anode	240 Vdc	1 mA	0	450 Vdc	4 mA
Grid On	140 Vdc	0.5 mA	125 Vdc	250 Vdc	10 mA
Grid Off	-200 Vdc	0.5 mA	-200 Vdc	-500 Vdc	1 mA
Cathode (E_k)	-8 kV	260 mA	-7.7 kV	-8.2 kV	300 mA
Collector w/RF	4.4 kV	275 mA		55% x $E_k \pm 2\%$	300 mA

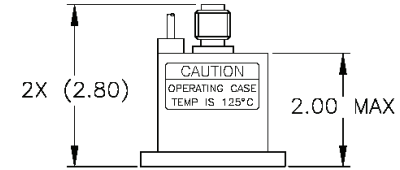
Cathode and Anode voltages are measured with respect to ground.
Heater, Collector, and Grid voltages are measured with respect to Cathode.
Anode voltage not required with Grid modulated version.

Performance	Typical	Spec
Input VSWR.....	1.6:1	2.5:1
Output VSWR.....	2:1	2.5:1
Max. Duty	—	CW
Grid Capacitance.....	50 pF	65 pF
Min. Harmonic Separation.....	-8 dBc	-4 dBc
Noise Power Density (dBm/MHz)	-20	-10
Prime Power.....	1300 W	1400 W

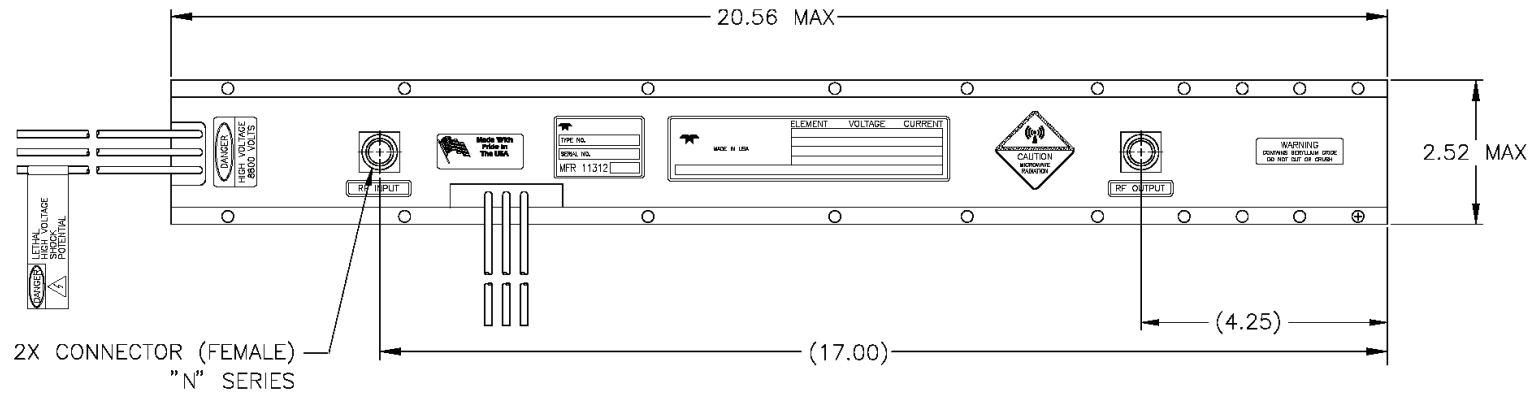
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NOTES:

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



END VIEW
ROTATED 90° CW



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

TITLE
MEC 5889/M5889NO

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

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