

X-Band Magnetron

M1489 is designed for the magnetron of x-band radar system. The frequency range is fixed <9405-9475MHz> and the peak output power is 1.8kW.

----- MAXIMUM RATINGS -----

	Min	Max	Unit
Peak anode current	1.5	3.0	A
Perk anode power input	-	6	kW
Duty cycle	-	0.001	-
Pulse duration	0.05	1.0	µs
Rate of rise of voltage pulse	-	50	kV/µs
Anode temperature	-	100	°C
V.S.W.R at the output coupler	-	1.5:1	-

----- ELECTRICAL -----

	Min	Typical	Max	Unit
Heater voltage (Note 1)	4.5	5.0	5.5	V
Preheat time	60	-	-	S
Peak anode voltage (Note 2)	1.5	1.85	2.2	kV
Peak output power (Note 2)	1.35	1.8	-	kW
Frequency (Note 2)	9405	9445	9475	MHz

Note 1: Measured with heater voltage of 5.0V and no anode input power, the heater current limits are 0.4A minimum, 0.5A maximum. No reduction of heater voltage is required.

Note 2: Measured at peak anode current 2.6A

M1489

OUTLINE

Note: Dimensions are in mm

Lead Connections

Colour	Element
Green	Heater
Yellow	Heater, Cathode

A	50 ± 0.8
B	70 ± 0.8
C	40 ± 0.8
D	75 ± 0.8
E	42max
F	15.5 ± 0.1
G	30 ± 0.1
H	$\phi 4.3 \begin{smallmatrix} +0.1 \\ 0 \end{smallmatrix}$
I	260 ± 10
J	10 ± 0.8

