

X-Band Magnetron

M1516 is designed for the magnetron of x-band radar system. The frequency range is fixed <9415-9475MHz> and the peak output power is 1.5kW.

---- MAXIMUM RATINGS ----

	Min	Max	Unit
Peak anode current	1.5	3.0	A
Peak anode power input	-	6	kW
Duty cycle	-	0.001	-
Pulse duration	0.1	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	1.5	-	kW
Frequency (Note 2)	9415	9445	9475	MHz

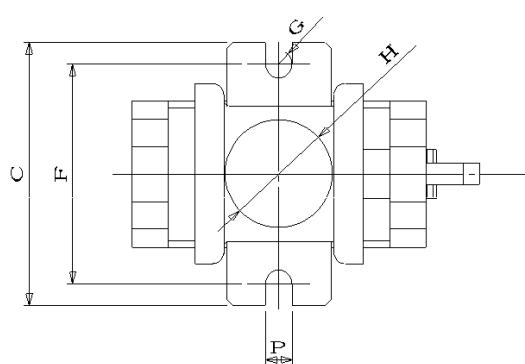
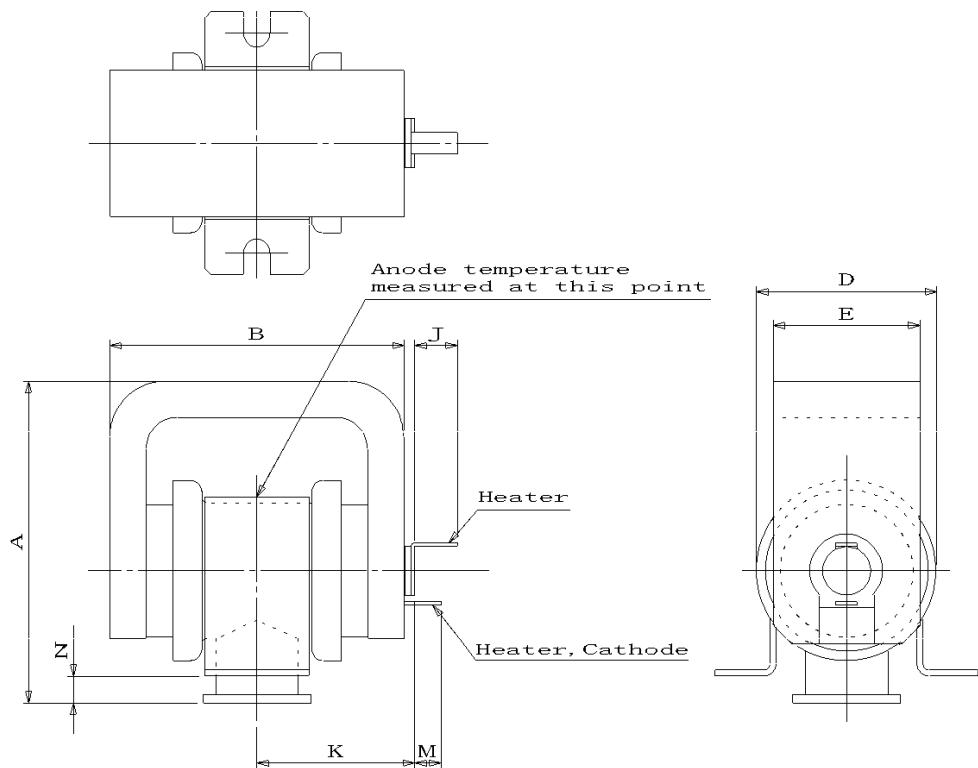
Note 1: When measured with heater voltage of 6.3V and no anode input power, the heater current limits are 0.4A minimum, 0.5A maximum. No reduction of heater voltage is required.

Note 2: Measured at peak anode current 2.6A

M1516

OUTLINE

Note: Dimensions are in mm



A	5.8 MAX
B	5.5 MAX
C	(43)
D	$\phi 29.5 \pm 2$
E	25 ± 2
F	36 ± 0.5
G	2-R2.25
H	$\phi 17.65 \pm 0.2$
J	6 MIN
K	25.8 ± 1
M	4 MIN
N	(4.4)
P	2-4.5

Fitting Plate

The customer need to prepare the fitting plate specified below, When install the M1516, it need to put the two teflon sheets (attached with the magnetron) between the magnetron output ceramic and hole 19.7mm diameter and to fix the magnetron two 4mm screws.

