

X-Band Magnetron

MSF1421B is designed for the magnetron of x-band radar system. The frequency range is fixed <9380-9440MHz> and the peak output power is 4kW.

--- MAXIMUM RATINGS ---

	Min	Max	Unit
Peak anode current	2.0	4.0	A
Perk anode power input	-	30	kW
Duty cycle	-	0.001	-
Pulse duration	0.05	1.0	μs
Rate of rise of voltage pulse	-	70	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)	5.7	6.3	6.9	V
Preheat time	60	-	-	S
Peak anode voltage (Note 2)	3.4	3.6	3.8	kV
Peak output power (Note 2)	3.6	4.0	-	kW
Frequency (Note 2)	9380	9410	9440	MHz

Note 1: Measured with heater voltage of 6.3V and no anode input power, the heater current limits are 0.5A minimum, 0.6A maximum. No reduction of heater voltage is required.

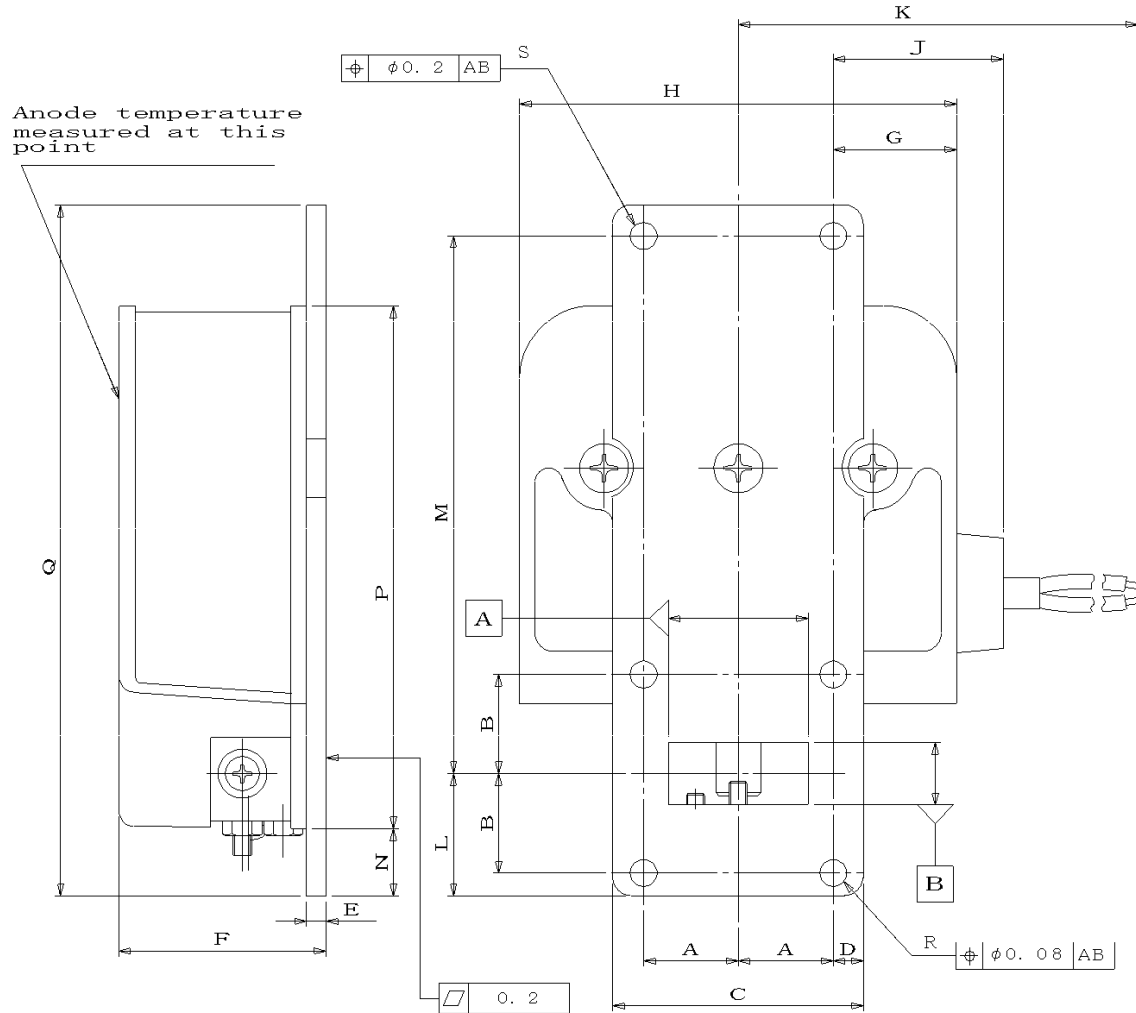
Note 2: Measured at peak anode current 3.0A



MSF1421B

OUTLINE

Note: Dimensions are in mm



	MIN	MAX
A	15.5	
B	16.25	
C	40.8	41.2
D	4.8	5.2
E	2.7	3.7
F	—	36.0
G	—	21.5
H	—	74.0

	MIN	MAX
J	—	30.0
K	240	—
L	19.6	20.2
M	88	
N	10.0	—
P	—	86.0
Q	112.6	113.2
R	$\phi 4.3$	$\phi 4.375$
S	$\phi 4.4$	$\phi 4.5$

Lead Connections

Colour	Element
Green	Heater
Yellow	Heater Cathode