

# MAF1421B

## X-Band Magnetron

MAF1421B 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
Average anode power input	-	13	W
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	5.7	6.3	6.9	V
Heater current (Note 1)	-	-	-	A
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

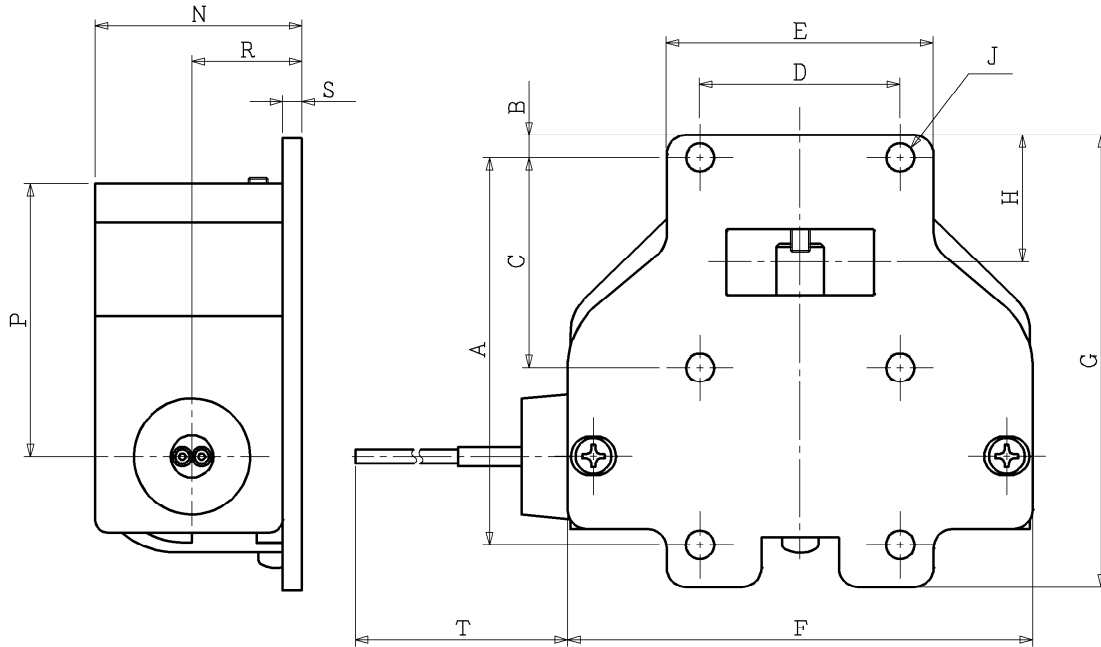
### Notes:

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 at operating is required.
2. Measured at peak anode current 3.0A.

# OUTLINE

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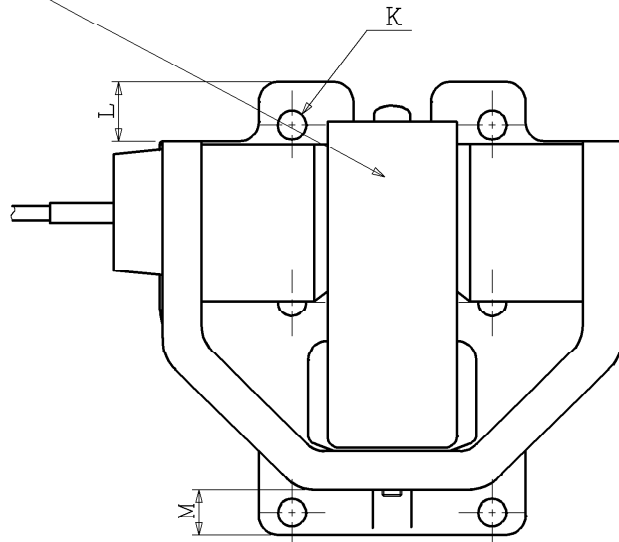
Note: Dimensions are in mm



Anode temperature measured at this point

DEMONSTRATIONS Unit: mm

A	60±0.2	K	2-φ4.4±0.1
B	3.75	L	9
C	32.5±0.1	M	7
D	31±0.1	N	33MAX
E	41.3	P	43
F	72	R	17
G	70	S	3
H	20	T	185±10
J	4-φ4.32±0.08		



Lead Connections

Colour	Element
Green	Heater
Yellow	Heater, Cathode

Top view