



X-Band Magnetron

MAF1452B is designed for the magnetron of x-band radar system. The frequency range is fixed <9380-9440MHz> and the peak output power is 1.8kW.

--- MAXIMUM RATINGS ---

	Min	Max	Unit
Peak anode current	1.5	2.2	A
Perk anode power input	-	4.4	kW
Duty cycle	-	0.001	-
Pulse duration	0.05	1	μs
Rate of rise of voltage pulse	-	55	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)	2.7	2.9	3	kV
Peak output power (Note 2)	1.5	1.8	-	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.

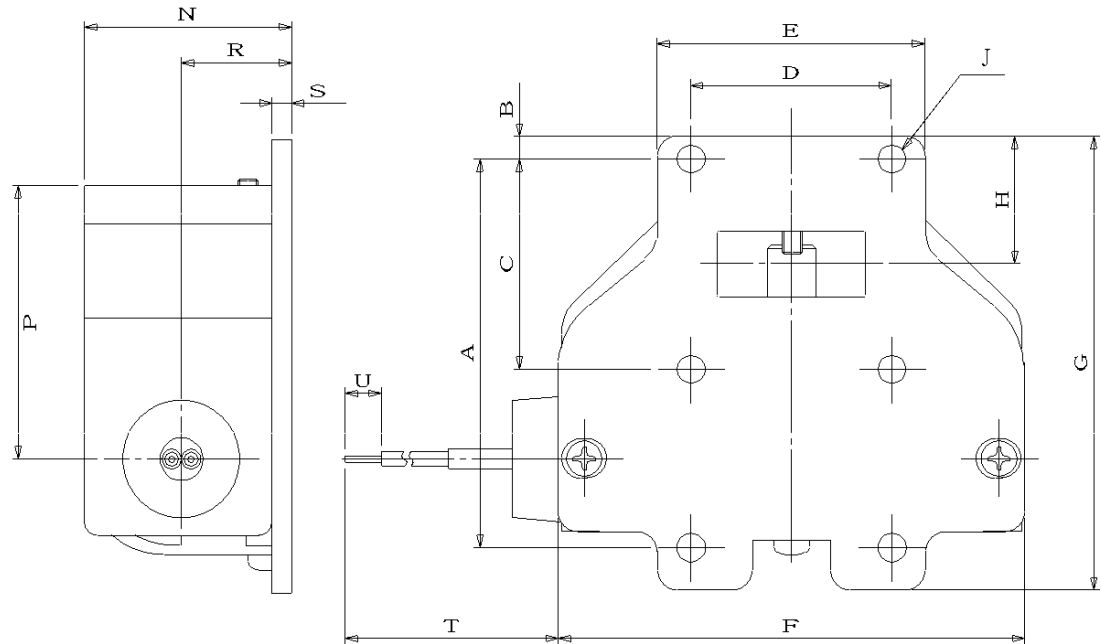
Note 2: Measured at peak anode current 2.0A



MAF 1452B

OUTLINE

Note: Dimensions are in mm



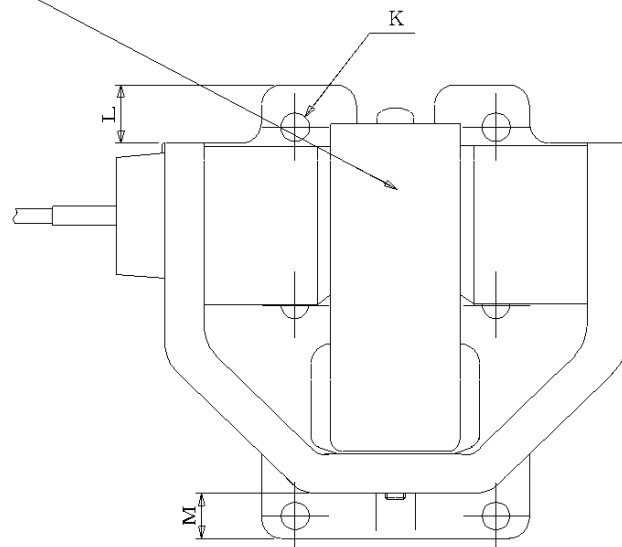
Anode temperature
measured at this point

DEMENSIONS Unit:mm

A	60 ± 0.2	K	$2 - \phi 4.4 \pm 0.1$
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	200 ± 10
J	$4 - \phi 4.32 \pm 0.08$	U	15MAX

Lead Connections

Colour	Element
Green	Heater
Yellow	Heater, Cathode



Top view