

## X-Band Magnetron

MAF1421B is designed for the magnetron of x-band radar system. The frequency range is fixed <9380-9440 MHz> and the peak output power is 4 kW.

#### --- 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	$\mathtt{MHz}$

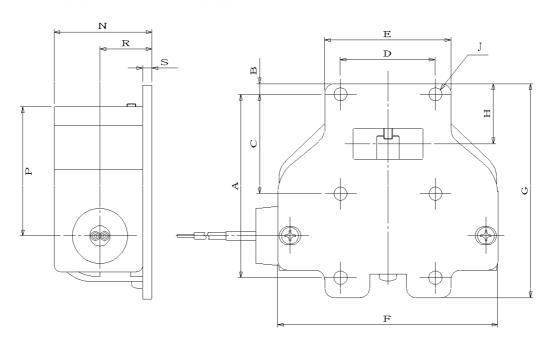
Note 1: Measured with heater voltage of 6.3V and no anode input power, the heater current limits are 0.5A minimum, 0.6A maximum. No reduction of heater voltage is required.

Note 2: Measured at peak anode current 3.0A

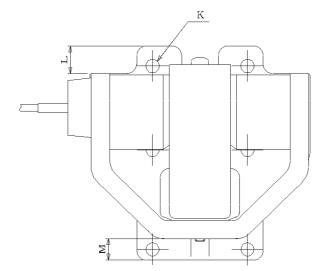


# MAF1421B

OUTLINE
Note: Dimensions are in mm



Α	60±0.2	J	4-φ4.32 ±0.08
В	3. 75	K	$2 - \phi 4$ . 4 $\pm 0$ . 1
C	32.5±0.1	L	9
D	31±0.1	M	7
E	41.3	Ν	ззмах
F	72	Р	43
G	70	R	17
Н	20	s	3



Lead Connections

Colour	Element	
Green	Heater	
Yellow	Heater, Cathode	

Top view