



*New Japan Radio Co., Ltd.*

## Technical Information

Rev.5

# MAF1611B

## X-Band Magnetron



MAF1611B 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 (Note3)	2.0	4.0	A
Average anode power input	-	16	W
Duty cycle	-	0.001	-
Pulse duration	0.05	1.25	us
Rate of rise of voltage pulse	-	50	kV/us
Anode temperature	-	100	degree centigrade
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	65	-	-	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.
3. Any overshoot of the anode current is not acceptable. The impedance of this  
magnetron is the same as current magnetron excluding the transient impedance.  
This means that the additional reactance should be required for adjustment  
the anode current wave form, if this magnetron will be installed into the  
similar modulator circuit as before.



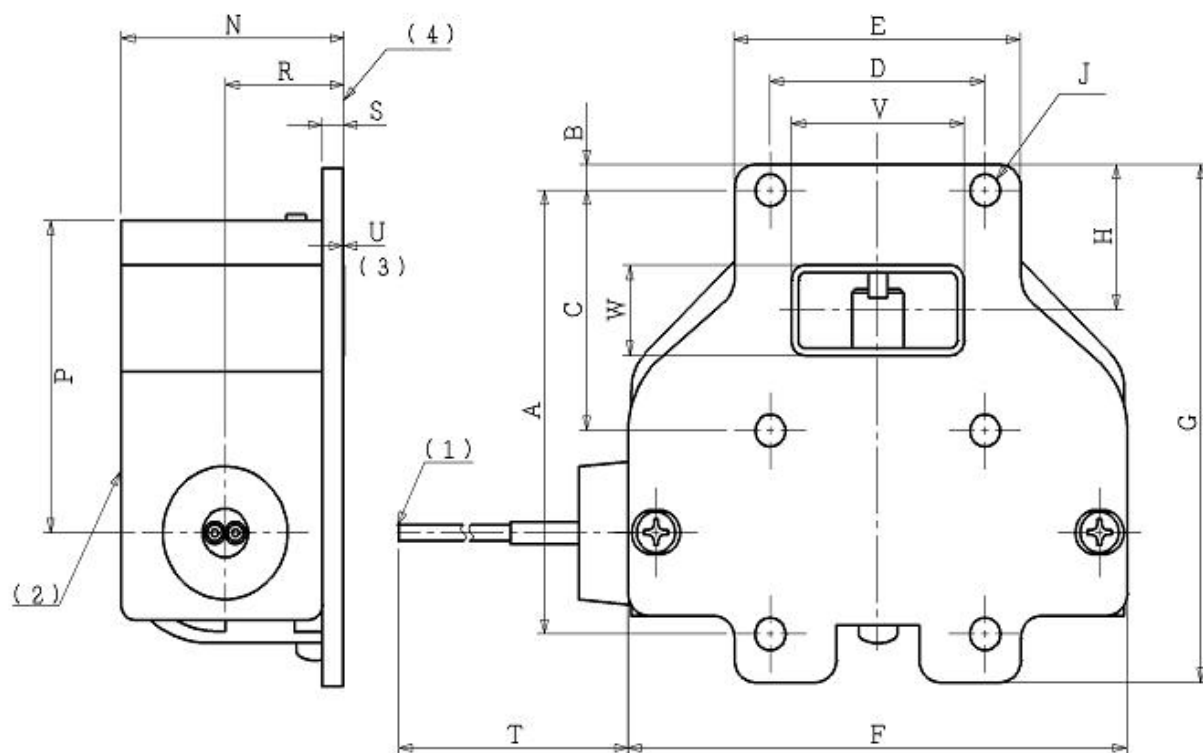
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## OUTLINE

Note: Dimensions are in mm



A	60±0.2	L	9
B	3.75	M	7
C	32.5±0.1	N	33MAX
D	31±0.1	P	43
E	41.3	R	17
F	72	S	3
G	70	T	185±10
H	20	U	0.1±0.05
J	4-φ4.32 ±0.08	V	24.9±0.2
K	2-φ4.4 ±0.1	W	12.2±0.2

### Lead Connections

Colour	Element
Green	Heater
Yellow	Heater, Cathode

Anode temperature  
measured at this point

