

Date

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Released

X band Magnetron

Model No. MAF1565N

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Microwave Division

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New Japan Radio Co., Ltd.
Microwave Division

Title:

Datasheet of MAF1565N

Reference No.:

DS-MAF1565N

Rev.:

05E

Sheet:

1/3

■ GENERAL DESCRIPTION

MAF1565N is designed for the magnetron of X band radar system. The frequency range is fixed <9380 - 9440MHz> and the peak output power is 10kW.

【V Technology】



■ ELECTRICAL CHARACTERISTICS

| PARAMETERS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-----------------------------|---------|---------|---------|-------|
| Heater voltage (note 1) | 6.0 | 6.3 | 6.6 | V |
| Heater current | 0.5 | 0.55 | 0.6 | A |
| Preheat time | 65 | - | - | s |
| Peak anode voltage (note 2) | 5.4 | 5.6 | 6.0 | kV |
| Peak output power (note 2) | 10.0 | 10.5 | - | kW |
| Frequency (note 2) | 9380 | 9410 | 9440 | MHz |

■ ABSOLUTE MAXIMUM RATINGS

These ratings cannot necessarily be used simultaneously and no individual ratings should be exceeded.

| PARAMETERS | MINIMUM | MAXIMUM | UNITS |
|-------------------------------|---------|---------|-------|
| Peak anode current (note 3) | 3.7 | 6.2 | A |
| Average anode power input | - | 40 | W |
| Duty cycle | - | 0.001 | - |
| Pulse duration | 0.07 | 1.25 | μs |
| Rate of rise of voltage pulse | - | 80 | kV/μs |
| Anode temperature | - | 100 | °C |
| VSWR at the output coupler | - | 1.5 : 1 | - |

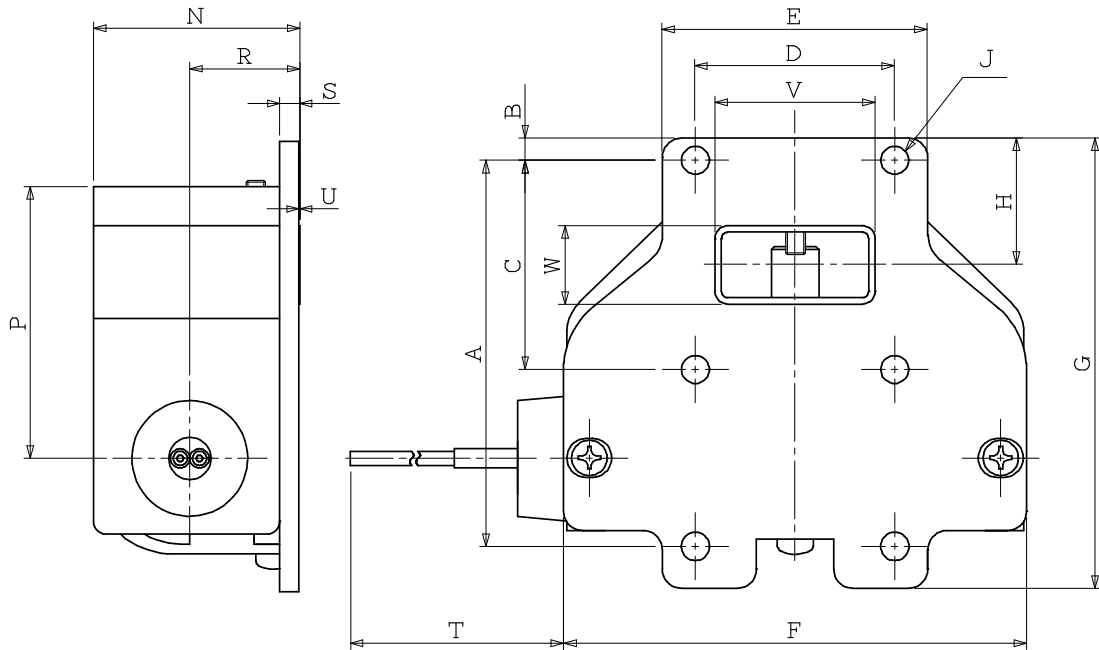
Notes

1. With no anode input power. No reduction of heater voltage at operating is required.
2. Measured at peak anode current 5.0A.

* Above Specifications are subject to change without notice.

- 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.

■ OUTLINE

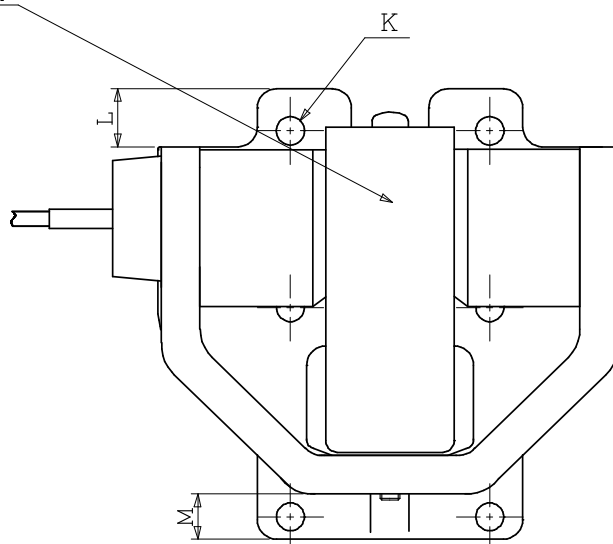


Anode temperature measured at this point

| | | | |
|---|------------------|---|----------|
| 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 |



Top View

(Dimensions are expressed in "mm".)

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