

**X-Band Magnetron**

MSF1421C is designed for the magnetron of X-band radar system. The frequency range is fixed between 9.415GHz and 9.475GHz. The peak output power is 4.0kW.

**---- MAXIMUM RATINGS ----**

|                                | Min  | Max   | Unit  |
|--------------------------------|------|-------|-------|
| Peak anode current             | 2.0  | 4.0   | A     |
| Peak anode power input         | -    | 30    | kW    |
| Duty cycle                     | -    | 0.001 | -     |
| Pulse duration                 | 0.05 | 1.0   | us    |
| Rate of rise of voltage pulse  | -    | 70    | kV/us |
| 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 (Note2)           | 9.415 | 9.445   | 9.475 | GHz  |

## Note:

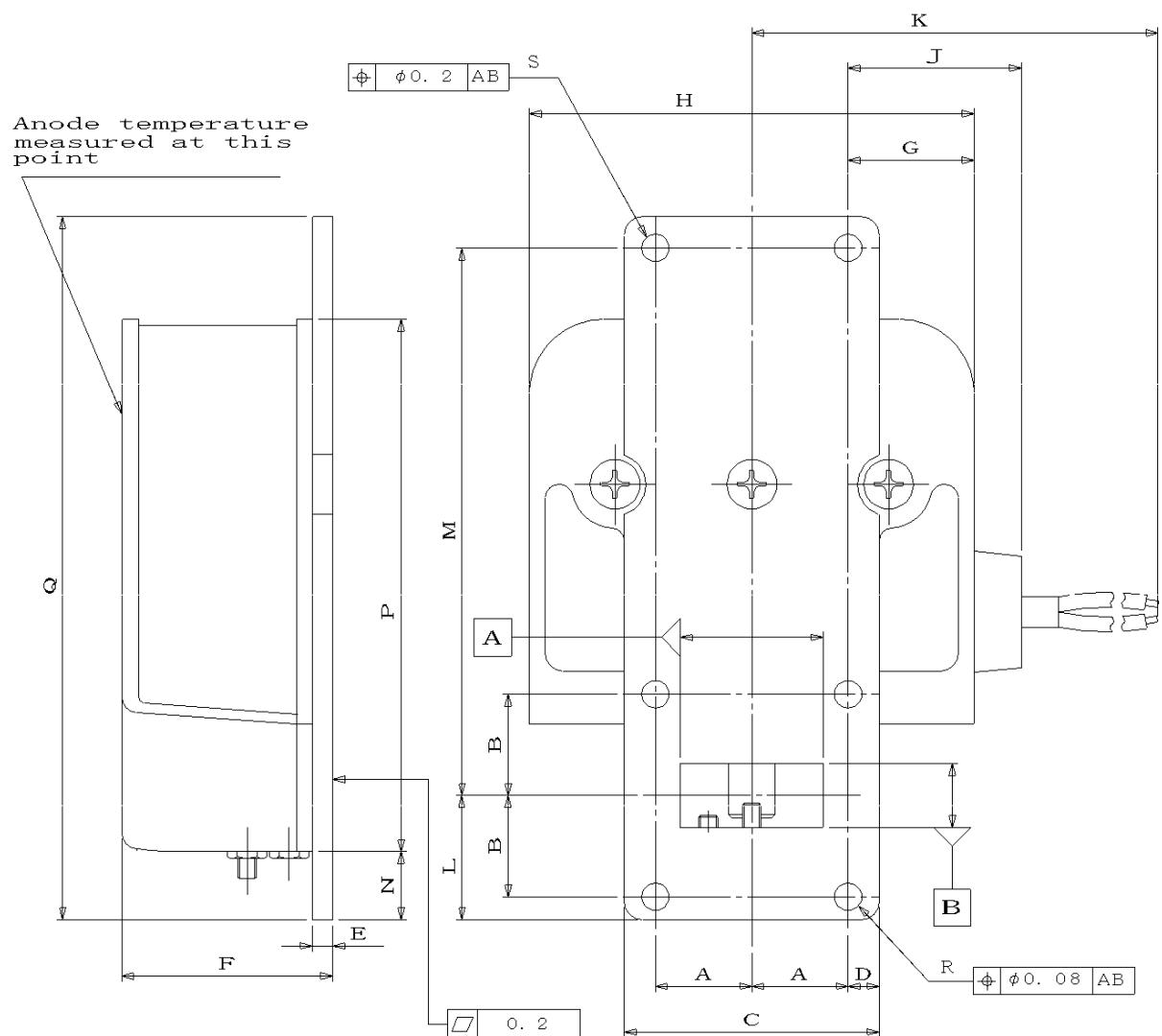
1. Measured with heater voltage of 6.3V and no anode input power, the heater current limits are 0.5A minimum, 0.6A maximum. No reduction of heater voltage is required.
2. Measured at peak anode current 3.0A.

For further information on the use of the magnetron, Please contact New JRC. New JRC reserves the right to change the specification of goods without notice.

# OUTLINE

Note : Dimensions are in mm

MSF 1421C



|   | MIN   | MAX  |
|---|-------|------|
| A | 15.5  |      |
| B | 16.25 |      |
| C | 40.8  | 41.2 |
| D | 4.8   | 5.2  |
| E | 2.7   | 3.7  |
| F | —     | 36.0 |
| G | —     | 21.5 |
| H | —     | 74.0 |

|   | MIN   | MAX   |
|---|-------|-------|
| J | —     | 30.0  |
| K | 240   | —     |
| L | 19.6  | 20.2  |
| M | 88    |       |
| N | 10.0  | —     |
| P | —     | 86.0  |
| Q | 112.6 | 113.2 |
| R | 4.3   | 4.375 |
| S | 4.4   | 4.5   |

## Lead Connections

| Colour | Element        |
|--------|----------------|
| Green  | Heater         |
| Yellow | Heater Cathode |