



New Japan Radio Co., Ltd.

Technical Information

Rev.1

M1636

X-Band Magnetron

M1636 is designed for the magnetron of x-band radar system. The frequency range is fixed <9380~9440MHz> and the peak output power is 25kW.

MAXIMUM RATINGS

	Min	Max	Unit
Peak anode current	6.0	10	A
Peak anode power input	-	75	kW
Duty cycle	-	0.001	-
Pulse duration	0.05	1.2	μ s
Rate of rise of voltage pulse	-	100	kV/ μ s
Anode temperature	-	110	degrees 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	120	-	-	S
Peak anode voltage (Note 2)	7.2	8.0	8.5	kV
Peak output power (Note 2)	22.5	25	-	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 0.43A minimum, 0.6A maximum.

Note 2: Measured at peak anode current 8.0A

Note 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.



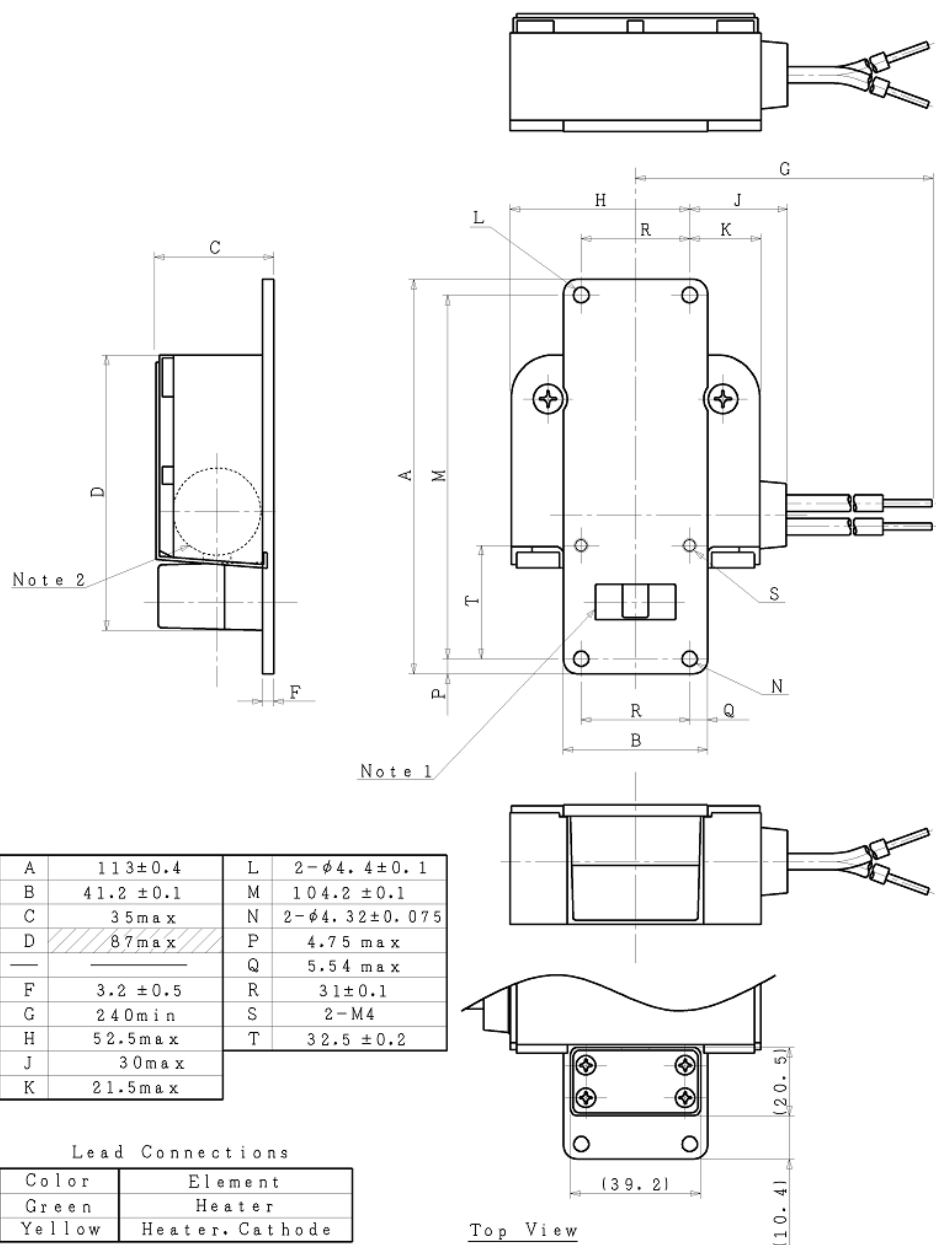
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OUTLINE

Note : Dimensions are in mm



Note 1: The position of the waveguide and fixing holes will be such that the valve operates into coupler type UG-40 B/U.

Note 2: Anode temperature measured at this point.