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**Released**

# S band Magnetron

## Model No. M1623

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**Microwave Division**

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New Japan Radio Co., Ltd.  
Microwave Division

Title:

Datasheet of M1623

Reference No.:  
DS-M1623

Rev.:  
08E

Sheet:  
1/3

## ■ GENERAL DESCRIPTION

M1623 is designed for the magnetron of S band radar system. The frequency range is fixed <3040 ~ 3060MHz> and the peak output power is 30kW.



## ■ ELECTRICAL CHARACTERISTICS

PARAMETERS	MINIMUM	TYPICAL	MAXIMUM	UNITS
Heater voltage (note 1)	5.7	6.3	6.9	V
Heater current	1.1	1.3	1.4	A
Preheat time	180	-	-	s
Peak anode voltage (note 2)	7.2	8.0	8.5	kV
Peak output power (note 2)	25	30	-	kW
Frequency (note 2)	3040	3043	3060	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	6.0	12.0	A
Peak anode power input	-	100	kW
Duty cycle	-	0.001	-
Pulse duration	0.07	1.0	μs
Rate of rise of voltage pulse	-	130	kV/μs
Anode temperature	-	120	°C
VSWR at the output coupler	-	1.5 : 1	-

### Notes

1. With no anode input power. For average pulse input powers greater than 25 watts, the heater voltage must be reduced within 3 seconds after the application of h.t. according to the following schedule:

\*Above Specifications are subject to change without notice.

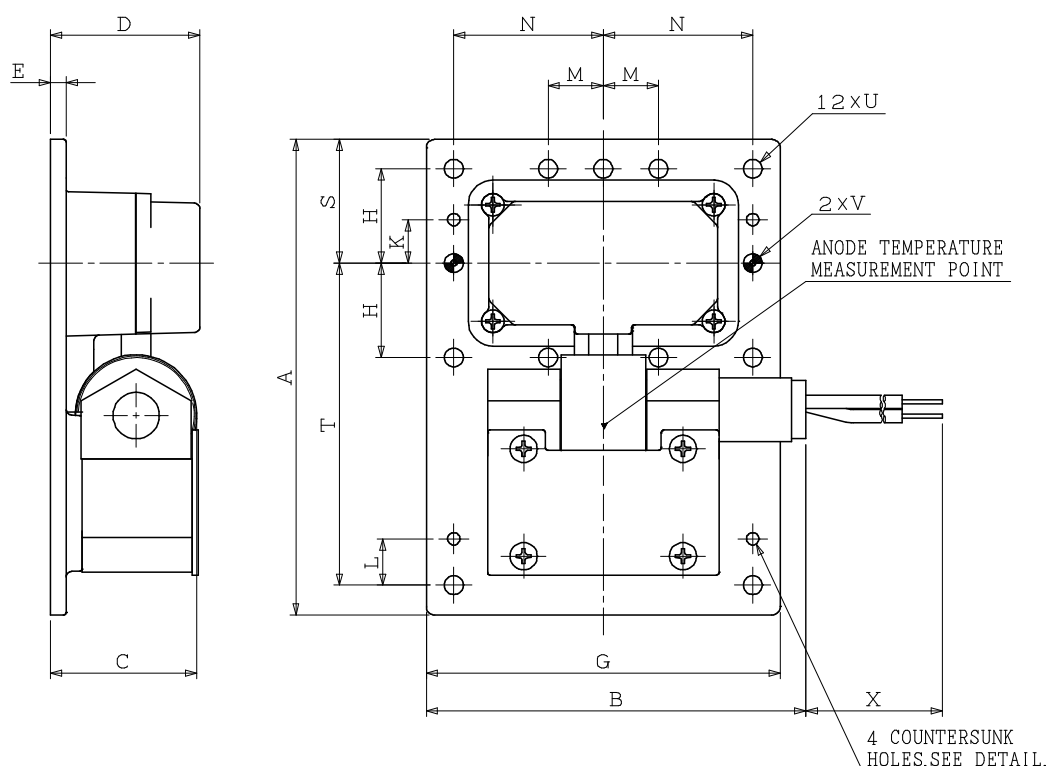
Mean input power(W)	Heater Voltage(V)
Less than 25	6.3
25 to 62	5.3
62 to 100	4.5

Mean input power (Pi) = Anode current × Anode voltage × Duty cycle (W)

2. Measured at peak anode current 8.0A.

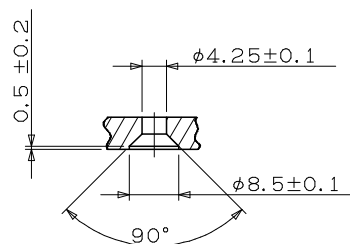
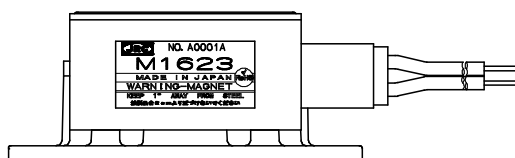
## ■ OUTLINE

(All Dimensions without limits are nominal.)



DEMONSTRATIONS Unit : mm

A	165.1MAX	M	19.05±0.05
B	150MAX	N	51.6±0.1
C	52MAX	P	---
D	55MAX	R	---
E	5.5	S	42.7
F	---	T	111.1
G	123.2MAX	U	φ6.5±0.1
H	32.54	V	φ6.5±0.05
J	---	W	---
K	15	X	250MIN
L	16		



DETAIL OF COUNTERSUNK HOLES

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