

Released

S-band Magnetron

Model No. M1555

Copyright©**Nisshinbo Micro Devices Inc.
Microwave Business Headquarters**

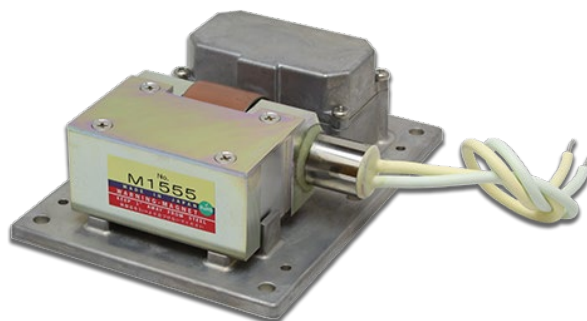
-Notice of Proprietary Information-

This document and its contents are proprietary to Nisshinbo Micro Devices Inc.
This publication and its contents may not be reproduced or distributed for any other purpose
without the written permission of Nisshinbo Micro Devices Inc.
Those specifications listed in this document are subject to change at any time.

■ GENERAL DESCRIPTION

M1555 is designed for the magnetron of S-band radar system. The frequency range is fixed <3040 - 3060MHz> and the peak output power is 30kW.

【V Technology】



■ 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:

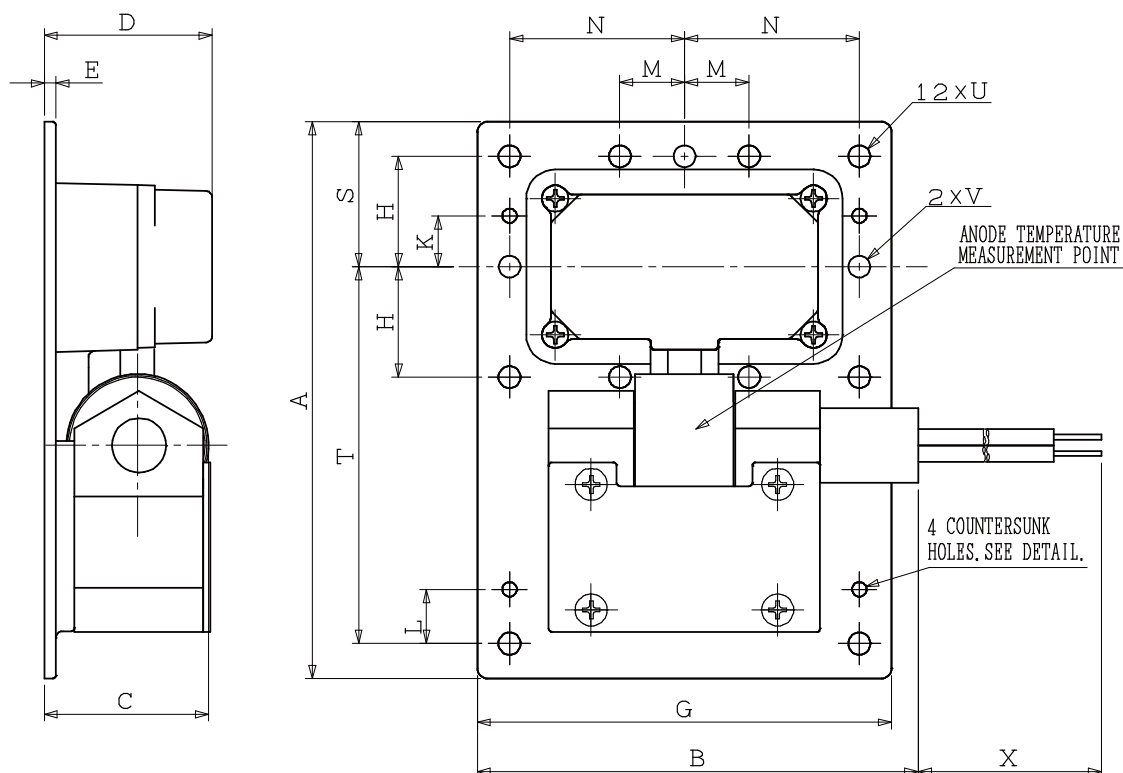
* Above Specifications are subject to change without notice.

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)

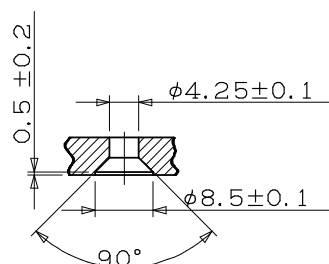
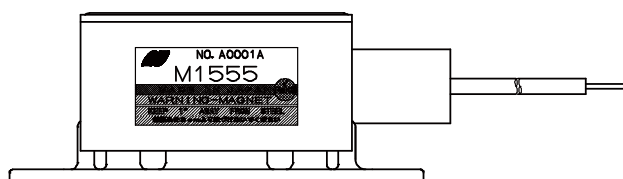
2. Measured at peak anode current 8.0A.

■ OUTLINE



DEMENSIONS 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

* Above Specifications are subject to change without notice.

