



NATIONAL

2M107A-795

(original)

TEST SPECIFICATION (NOTE 1 & 2)

Description : Continuous Wave Magnetron, 2450 MHz, Fixed Frequency

1. Absolut Maximum Ratings :

	Symbol	Min	Max	Unit	Note
Filament Voltage	Ef	2.85	3.75	V	
Pre-heating Time	tk	0	—	s	
Average Anode Current	Ib	—	350	mAdc	
Peal. Anode Current	ibm	—	1.2	Ap	
Peak Anode Voltage	ebm	—	4.5	KVp	
Average Anode Input	pi	—	1.4	KW	
Load VSWR (continuous)	σL	—	4	—	(15)
Anode Core Temperature	Tp	—	300	°C	(3)
Filter Case Temperature	Tcase	—	120	°C	
Antenna Temperature	Ta	—	360	°C	
Storage Temperature	—	-30	60	°C	

2. General Test Condition :

	Symbol	Value
Filament Voltage	Ef	3.3 V
Pre-heating Time	tk	8 sec
Average Anode Current	Ib	300. mAdc
Load VSWR	σL	1.1 Max
Cooling Air Flow		1.0 m ³ /min
Test Equipment		Page 11 ~ 12/12
Power Supply	----- Single-phase,full-wave rectifier without filter	

3. Test Specifications :

Item	Symbol	Nominal	Min	Max	Unit	Note
Filament Current	If	11.5	9.5	12.5	A	
Peak Anode Voltage	ebm	4.10	3.90	4.30	KVp	(5)
Average Output Power	Po	900	860	950	W	(5)
Frequency	fo	2455	2445	2465	MHz	

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2M107A-### (Proposed)

TEST SPECIFICATION (NOTE)

Description : Continuous Wave Magnetron, 2450 MHz, Fixed Frequency

1. Absolut Maximum Ratings :

	Symbol	Min	Max	Unit	Note
Filament Voltage	Ef	2.90	3.90	Vac	
Pre-heating Time	tk	0	—	s	
Average Anode Current	Ib	—	400	mAdc	
Peak Anode Current	ibm	—	1.4	Ap	
Peak Anode Voltage	ebm	—	4.65	kVp	
Average Anode Input	pi	—	1.6	kW	
Load VSWR (continuous)	σL	—	4	—	(15)
Anode Core Temperature	Tp	—	300	°C	(3)
Filter Case Temperature	Tcase	—	120	°C	
Antenna Temperature	Ta	—	360	°C	
Storage Temperature	—	-30	60	°C	

2. General Test Condition :

	Symbol	Value
Filament Voltage	Ef	3.4 Vac
Pre-heating Time	tk	8 sec
Average Anode Current	Ib	350 mAdc
Load VSWR	σL	1.1 Max
Cooling Air Flow	Q	1.0 m ³ /min
Test Equipment		Page 14 ~ 15/15
Power Supply	----- Single-phase,full-wave rectifier without filter	

3. Test Specifications :

Item	Symbol	Nominal	Min	Max	Unit	Note
Filament Current	If	13.5	12.0	15.0	Aac	
Peak Anode Voltage	ebm	4.35	4.05	4.65	kVp	(5)
Average Output Power	Po	1070	1000	1140	W	(5)
Frequency	fo	2450	2460	2470	MHz	

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