

Product Specification

Spec No.

Model No.

5.8GHz(Water Cooling)

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This Specifications is based on the General Rules of Inspection for Electron Tubes ED-1101 and the Testing Methods for Continuous Wave Magnetrons ED-1501 set by the Electronic Industries Association of Japan (EIAJ).

Absolute Maximum Rating

Description		Continuous Wave Magnetron (Fixed Frequency, Packaged Magnet and Probe Output)												
Outline		See the Outline Drawing					Net Weight			Approximately 1.5 kg				
Absolute Maximum Rating	Item	Ef Stand-by	Ef Operation	tk	ebm	lb	ibm	Pi	σ_L ⑨	Ta⑤	Tp③	Tc③	storage	
	Unit	V	V	s	kV	mAdc	A	kW	-	°C	°C	°C	°C	
	Max.	3.8	②	-	5.00	300	1.2	1.3	2.0	240	100	120④	60	
	Min.	2.8	②	0	-	-	-	-	-	-	-	-	-30	
Standard Test Condition①		3.3	0	3	-	250	-	-	1.1 MAX	-	-	-	-	

Test Specification

Test Item⑩	Test Method ED-1501	Test Condition①	Symbol	Nominal	Limit		Unit	
					Min.	Max.		
*Filament Current	4.1.1	tk=120	If	9.2	8.5	10.5	A	
Peak Anode Voltage	4.3.1	⑥	ebm	4.55	4.35	4.75	kV	
Average Output Power (1)	4.3.3.1	⑥	Po(1)	750	700	-	W	
Frequency	4.3.4	⑥	f	5800	5785	5815	MHz	
*Load Characteristics	Pulling Factor	4.3.6	$\sigma_L=1.5$	fpl	-	-	20	MHz
	Sink Phase	4.3.7	$\sigma_L=1.5$	λ_{sink}/λ_g	0.23	-	-	-
*Stability Moding (1)	4.3.11.2	$\sigma_L=2, t=60s$	ST	No Moding			-	
Emission Moding (2)	4.3.11.3	Ef=0, t≤5s	Efm	No Moding			-	
*Power Leakage	4.3.15	$\sigma_L=2$	Sl	-	-	10	W/m ²	
*Surge Voltage	-	⑦	-	-	-	10	kV	
Insulation	4.2	1kVdc	Rpf	-	1000	-	MΩ	
Breakdown Voltage	4.2	7.1kVac or 10kVdc, t=60s	V _{BV}	No Abnormality⑧			-	
**Vibration	5.4	-	-	No Abnormality			-	

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Unit : mm

Note

- ① Tp measurement point
To be measured at the outlet side of air flow.
- ② Tc measurement point
- ③ Ta measurement point
- ④ Adaptable for #250 faston receptacle.

