

# Product Specification

Spec No. 5.8GHz / Water Cooling

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Model No. M5801

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	$\sigma_L$ 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	$\sigma_L=1.5$	$\lambda_{sink}/\lambda_g$	0.23	-	-	-
*Stability Moding (1)	4.3.11.2	$\sigma_L=2, t=60s$	ST	No Moding			-	
Emission Moding (2)	4.3.11.3	$Ef=0, t \leq 5s$	Efm	No Moding			-	
*Power Leakage	4.3.15	$\sigma_L=2$	Sl	-	-	10	W/m <sup>2</sup>	
*Surge Voltage	-	⑦	-	-	-	10	kV	
Insulation	4.2	1kVdc	Rpf	-	1000	-	MΩ	
Breakdown Voltage	4.2	7.1kVac or 10kVdc, t=60s	V <sub>BV</sub>	No Abnormality⑧			-	
**Vibration	5.4	-	-	No Abnormality			-	

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# Outline Drawing

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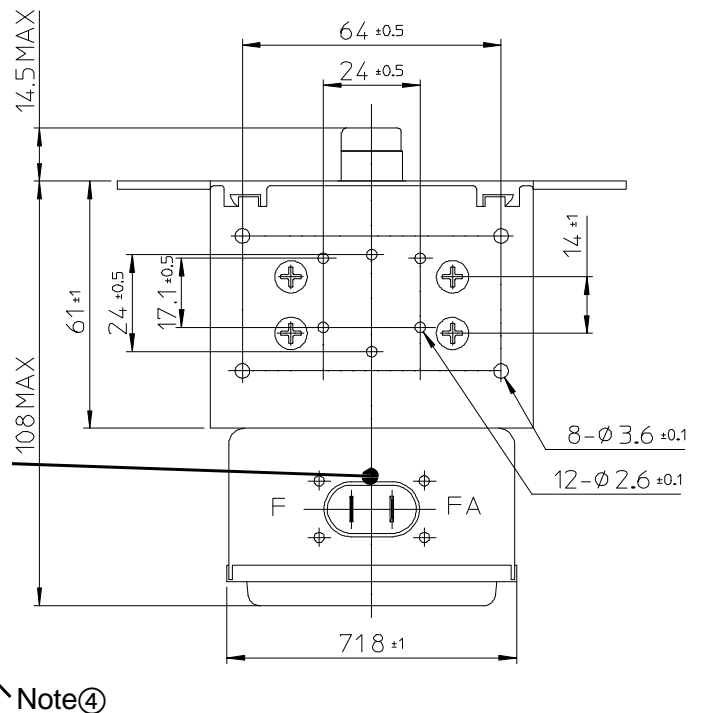
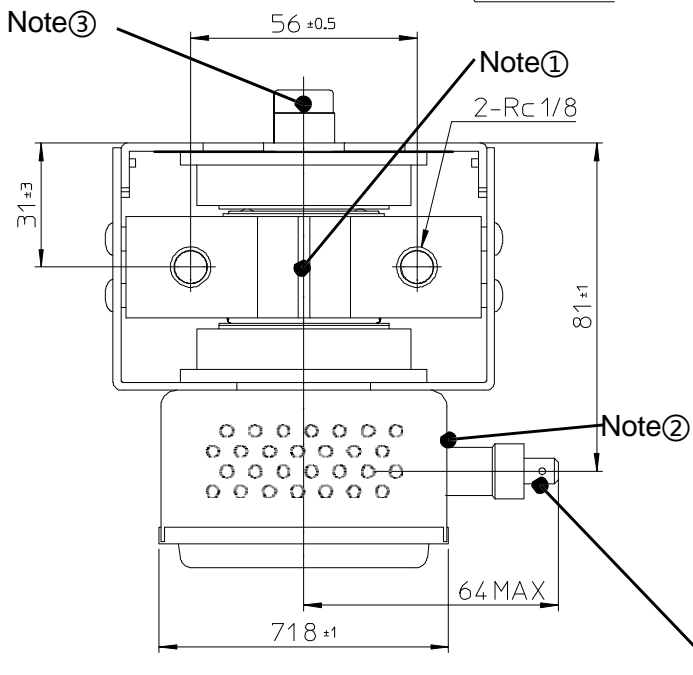
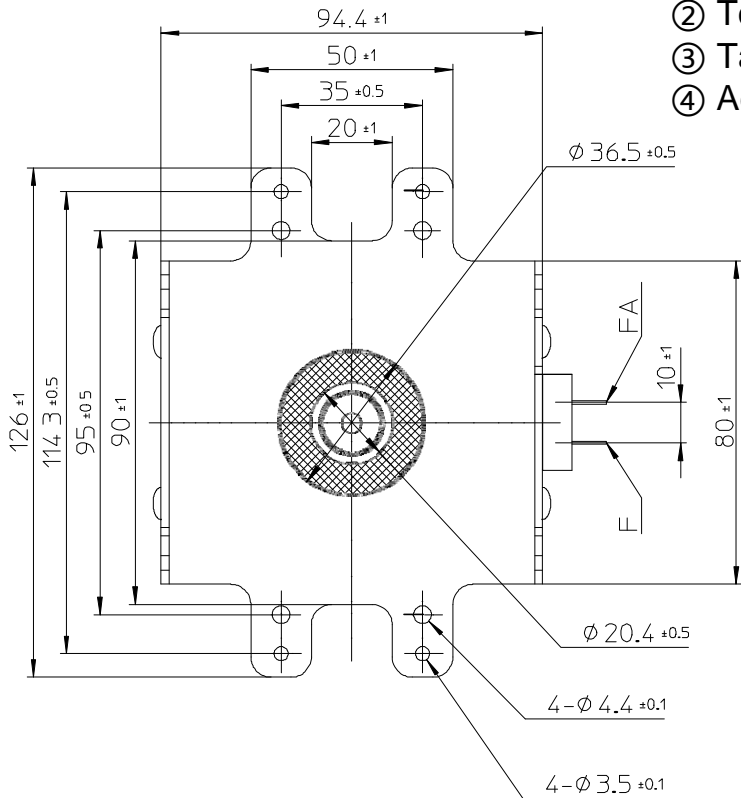
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Unit : mm

## 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.



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