WITOL

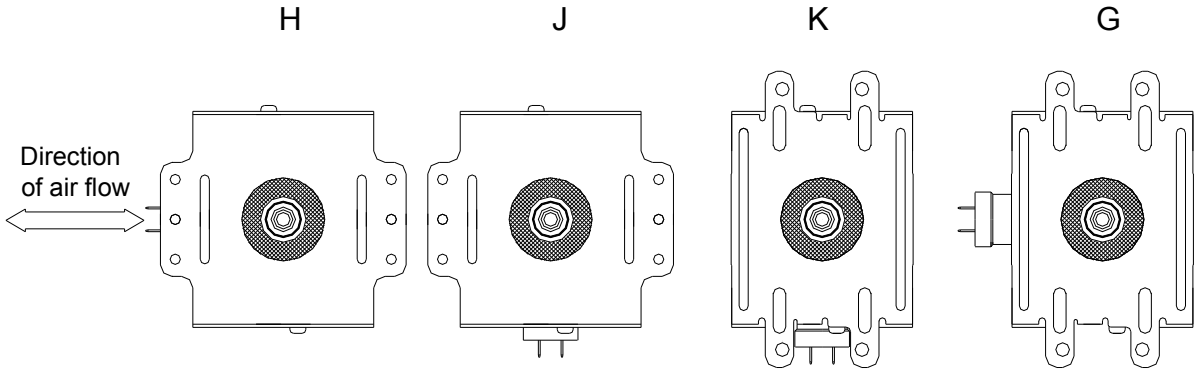
SPECIFICATIONS

FOR
WITOL MAGNETRON
2M343 SERIES

MANUFACTURER	CUSTOMER
SIGNATURES :	SIGNATURES :
PROPOSED BY	APPROVED BY

GD WITOL VACUUM ELECTRONIC MANUFACTURE CO.,LTD.

2M343 Series Products in Witol:



Contents For 2M343 Series Specifications：

Characteristic Parameters

This standard is based on EIAJED-1501 Testing Methods for Continuos Wave Magnetron.											
Description	Magnetron(Fixed Frequency、Integral Magnet)										
Function	For microwave Oven(2450MHz Band Continuous Wave Oscillation)										
Outer Dimensions	See Outline Drawing										
Absolute Maximum Ratings	Test Item	Ef	tk	ebm	Ib	ibm	Pi	σ L	Tp④	Tc④	Storage
	Unit	V	S	Kv	Madc	A	KW	——	℃	℃	℃
	Max.	3.5	——	5.0	480	1.8	2.3	3	330⑤	100⑥	60
	Min.	2.5	0	——	——	——	——	——	——	——	-30
Standard Test Condition	①②③	3.0	——	——	430	——	——	1.1max	——	——	——

Test Specification

Test Term		Test Method EIAJED-1501	Test Condition	Symbol	Nominal	Limit		Unit
						Min	Max	
**Vibration		5.4.1		——	——	——	——	——
Break Down Voltage		4.2	⑦	——	——	——	——	——
Insulation		4.2	Et=1kVDC R.H.max.60%	Rpf	——	200	——	MΩ
*Filament Current		4.1.1	tk=120s	If	10	8	12	A
Peak Anode Voltage		4.3.1	⑧	ebm	4.65	4.5	4.8	KV
Average Power Output		4.3.3.1	⑧	Po	**1500**	1380	——	W
Frequency		4.3.4		f	2458	2448	2468	MHz
*Load Characteristics	Pulling Figure	4.3.6	σ L=1.5	fpl	——	——	15	MHz
	Sink Phase	4.3.7		λ sink/λg	0.25	——	——	
*Stability Moding		4.3.11.2	σ L=2,3,4 t=60s	——	——	——	——	——
*Leakage Microwave		4.3.15	σ L=4	SI	——	——	10	W/㎡
**Life Test		4.5.1		t	——	500	——	H
**Life Test End Point	Average Power Output	4.3.3.1	⑧	Po	——	1160	——	W

Note：1.Prescribed R.F. Coupler(Refer to the attached chart) or the similar type must be used.

2.Forced air cooling (1200L/min).

3.Single phase full wave rectified without filter shall be used for power supply.

4.See outline drawing for temperature measuring point.

5.Maximum saturated anode temperature for normal condition(with load in the cavity) should be 220℃. But, in the case of professional use, absolute maximum anode temperature should be 250℃。

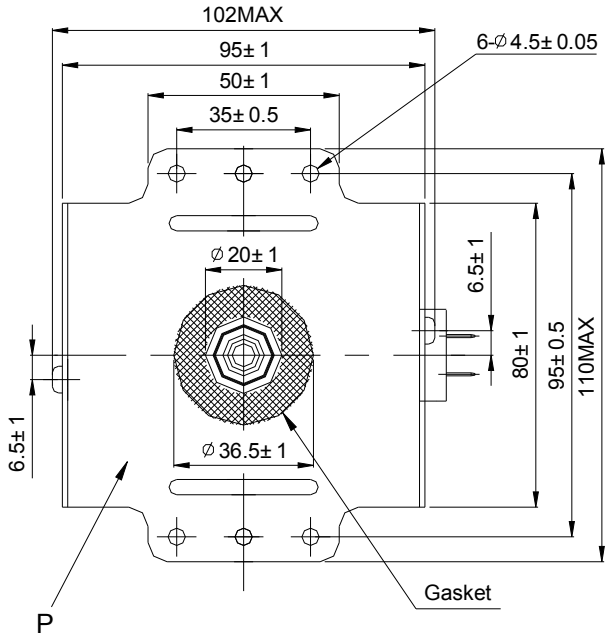
6.The capacitor temperature should be 120℃。

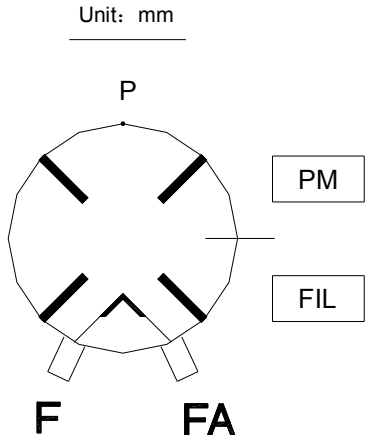
7.Et=10kVDC 或 Et=7.1kVAC t=60sec。

8.The surrounding temperature will be settled at the value of 25℃； and it's exchange rate should be -0.002℃。

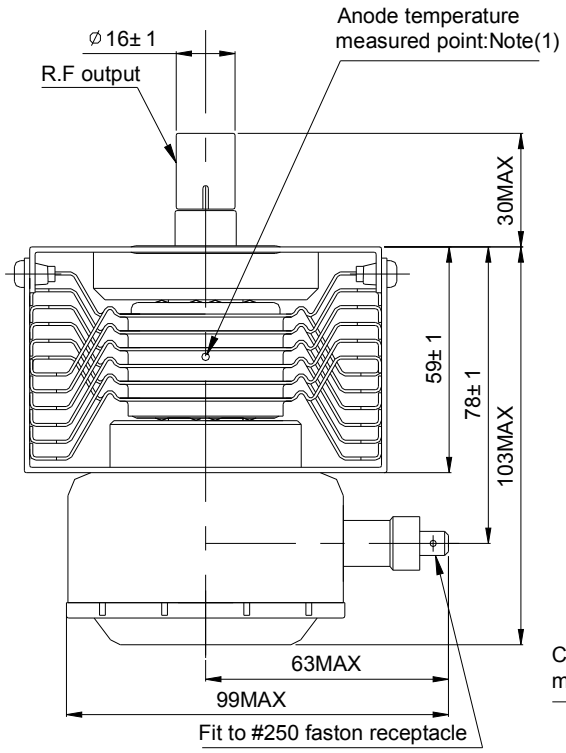
9.Tests shall be classified as follows: None mark:production test, *mark:design test, **marktype approval test

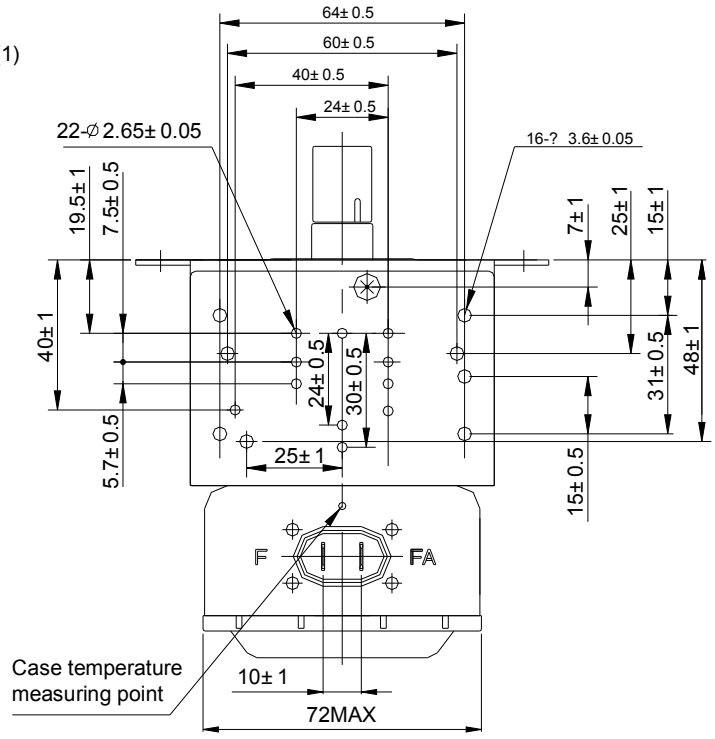
Outline Drawing





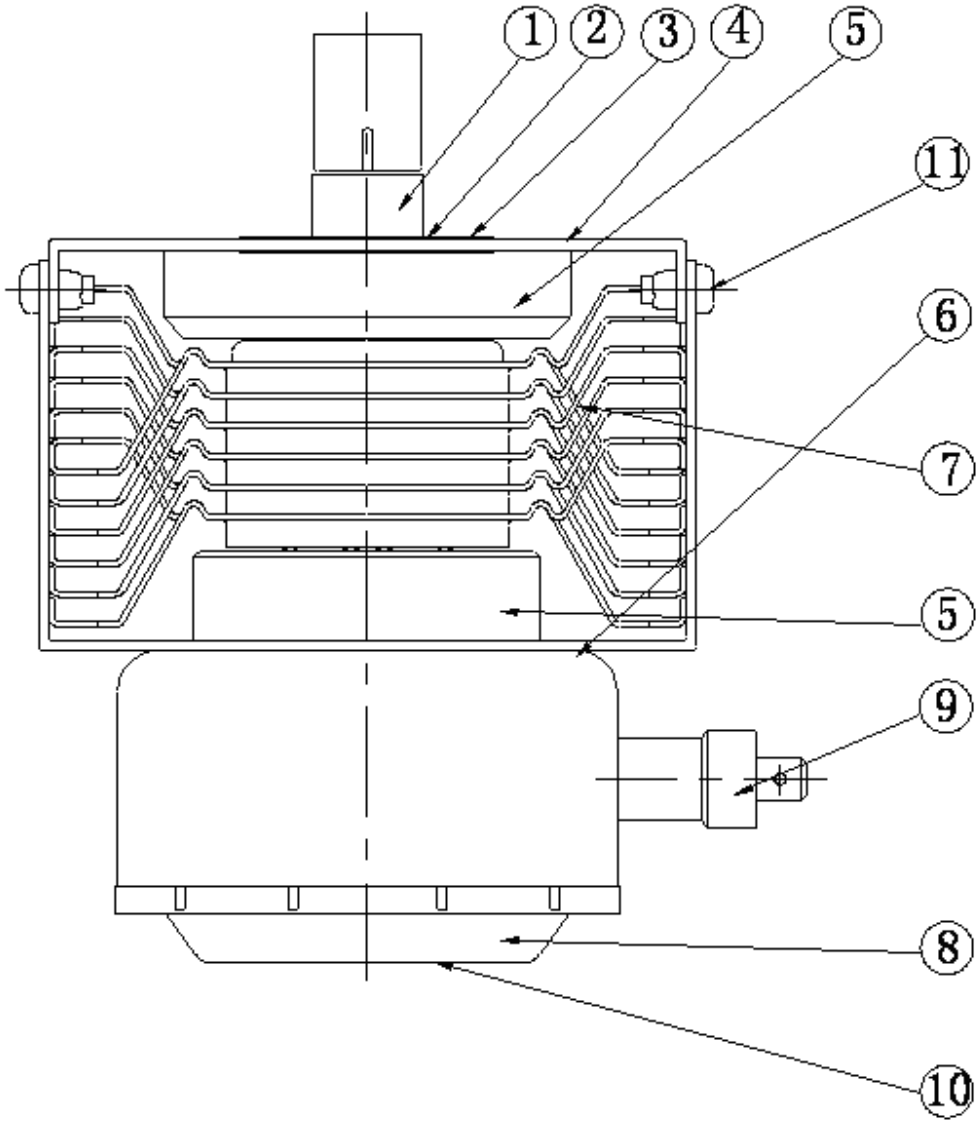
Note(1):Temperature to be measured at the outlet of airflow.



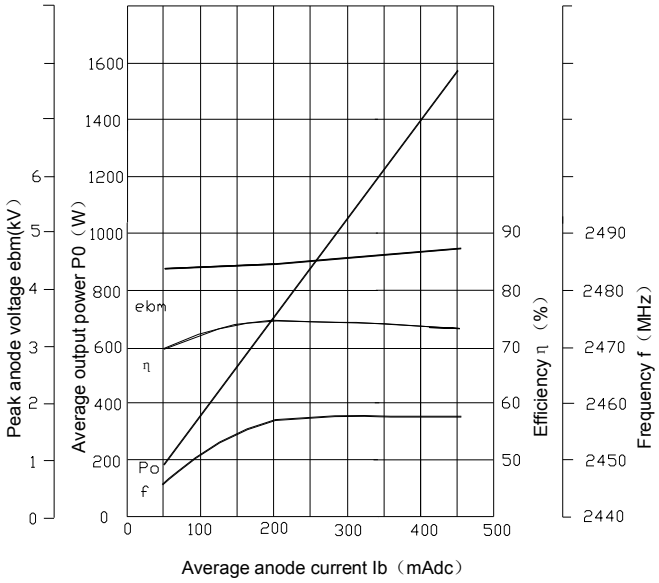


Parts List

NO	Parts name	Material/Spec	Q'ty
①	Core tube	Copper, Ceramic, other	1
②	Gasket Ring	Steel (Zn plated) T0.25	1
③	RF gasket	Brass	1
④	Mounting Yoke	Steel (Zn plated) T1.4	1
⑤	Magnet	Sr or Ba Ferrite	2
⑥	Yoke Assembly	Steel (Zn Plated) T1.4&T0.4	1
⑦	Cooling fin	T0.8	6
⑧	Shield Case Cover	Steel (Zn plated) T0.4	1
⑨	Filter Assembly	C：500pFx2 WV10kVdc / L:1.5μHx2	1
⑩	Label	Label	1
⑪	Screw	SWRCH M4xL8	2

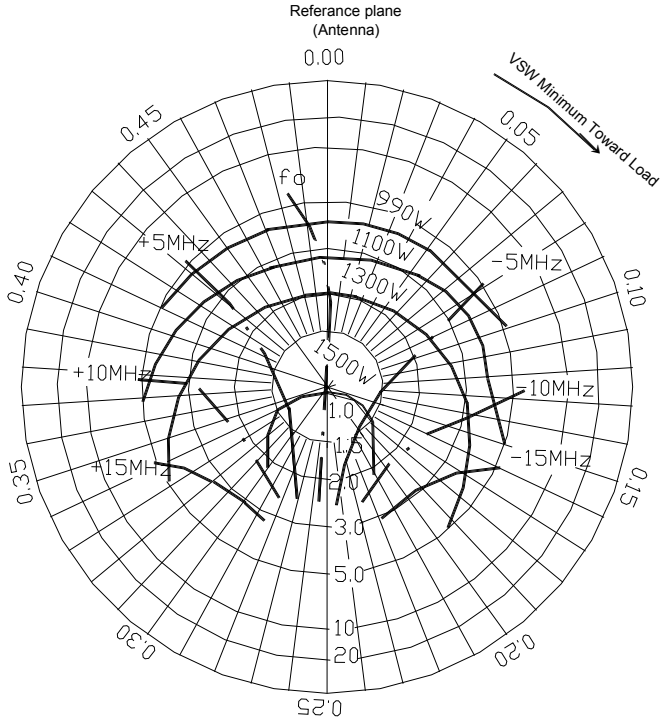


Performance Chart



Operating condintions:
Power supply:Single phase full wave recited without filter
Filament voltage:3.0V
Load VSWR:1.1MAX

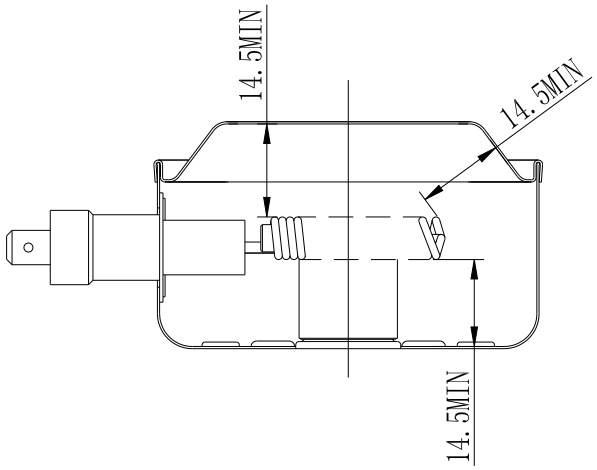
Rieke Diagram

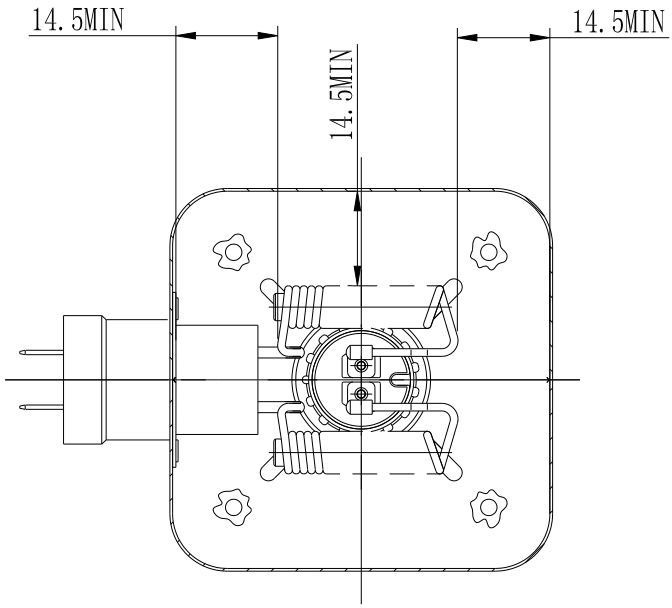


Operating conditions
Power supply:Single phase full wave recited without filter
Filament voltage:3.0V
Average anode current:430mAdc(constant)

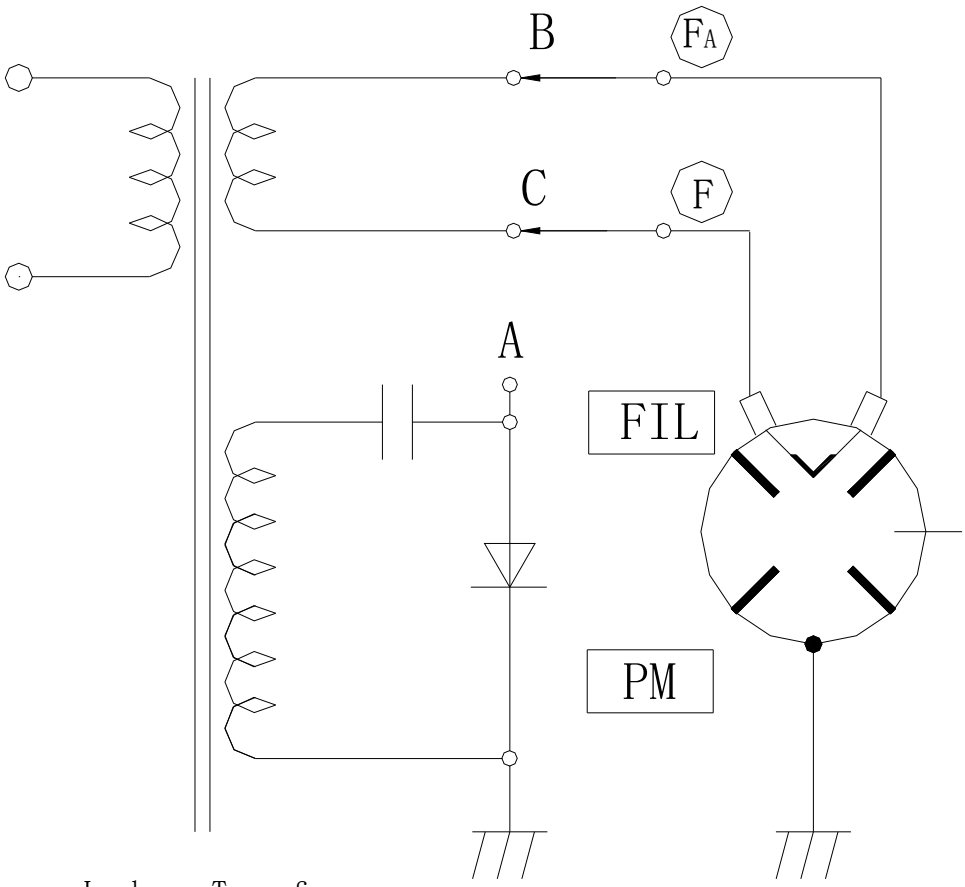
Space in the Shielding case

Unit: mm





Filament Connection



Leakage Transformer

How to connect filament

The phase between the filament coil and the high voltage coil are related as shown in the above diagram。

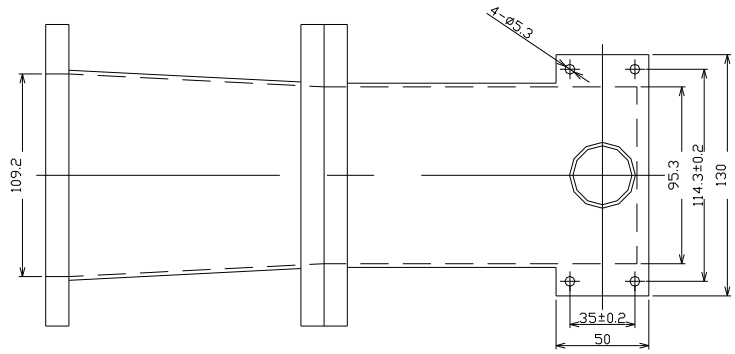
(1) FA terminal will be connected to ″B″.and

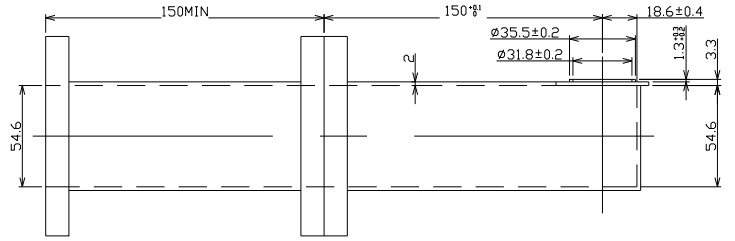
F terminal will be connected to ″C″.

(2) ″A″ will be connected to ″B″ or ″C″.

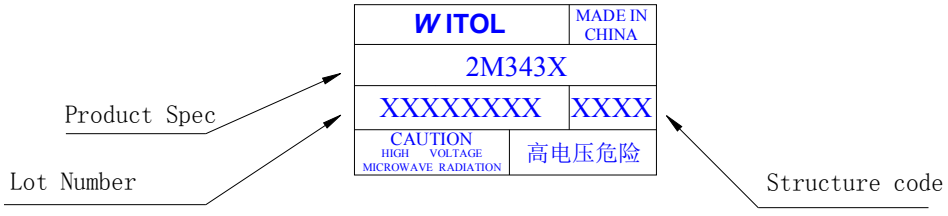
RF Coupler

Unit:mm





Label Specification



Note:

1、Product Spec: It indicates magnetron's model name.

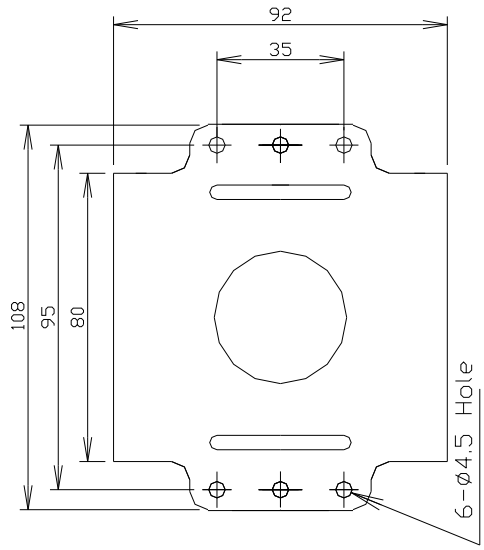
2、Lot NO: It shows the manufacturing date and the numble of assembly line.

3、"xxxx" as the magnetron's structure code.

Mounting Yokes List

Unit:mm

920



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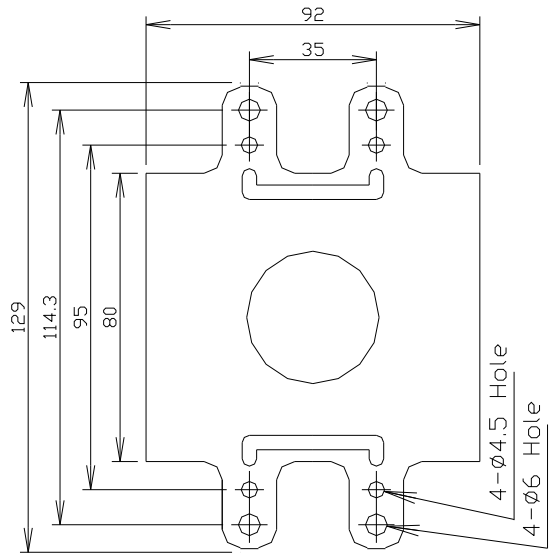

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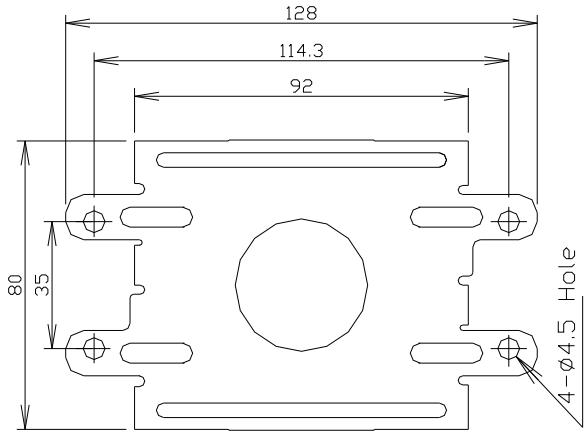

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