

6. Specification of DAEWOO Magnetron of 2M218

▶ FCC ID : C5F7NF1AMO1000 ◀



DAEWOO
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MAGNETRON DIVISION

TO :

APPROVAL SIGNATURE

S P E C I F I C A T I O N

FOR
DAEWOO MAGNETRON

2 M 2 1 8

No-Hon Myong

NO-HON MYONG
MANAGER, MAGNETRON DEPT.

SPECIFICATION NO. :
ISSUED :

2 M 2 1 8

This specification is based upon EIAJ ET-145A Testing Methods for Continuous Wave Magnetrons

DAEWOO CONTINUOUS WAVE MAGNETRON 2M218

DESCRIPTION	Magnetron (Fixed Frequency, Integral Magnet)									
FUNCTION	For Microwave Oven (2450MHz Band continuous wave oscillation)									
OUTER DIMENSIONS	See Outline drawing									
ABSOLUTE MAXIMUM RATINGS									NOTE(4)(5)	NOTE(4)
	TERM	Ef	tk	e _{bm}	lb	ibm	Pi	σ _L	T _p	T _{case}
	UNIT	V	s	kV	mAdc	A	kW	-	°C	°C
	MAX.	3.75	-	4.5	350	1.2	1.4	4	250	100
	MIN.	2.80	0	-	-	-	-	-	-	-
STANDARD TEST CONDITION	NOTE (1)(2)(3)	3.30	-	-	300	-	-	1.1MAX	-	-

TEST SPECIFICATION

TEST TERM NOTE (8)	TEST METHOD EIAJ ET-145A	TEST CONDITION	SYMBOL	BOGIE	LIMIT		UNIT
					MIN.	MAX.	
*** VIBRATION	5.4.1		-	-	-	-	-
* BREAK DOWN VOLTAGE	4.2	NOTE (6)	-	-	-	-	-
* INSULATION	4.2	E _b =1kVdc R.H.MAX.60%	-	-	100	-	MΩ
* FILAMENT CURRENT	4.1.1	tk=120s	If	10	8	12	A
PEAK ANODE VOLTAGE	4.3.1	NOTE (7)	e _{bm}	4.10	3.95	4.25	kV
AVERAGE POWER OUTPUT(1)	4.3.3.1	NOTE (7)	P _o (1)	925	885	965	W
FREQUENCY	4.3.4		f	2450	2448	1468	MHz
*** PULLING FIGURE	4.3.6	σ _L = 1.5	f _{pl}	-	-	15	MHz
*** SINK PHASE	4.3.7		λ _{sink} /λ _g	0.25	-	-	-
* STABILITY MODING (1)	4.3.11.2	σ _L = 2,3,4; t=60s	-	-	-	-	-
* FUNDAMENTAL FREQUENCY RADIATION	4.3.15	σ _L = 4	S _L	-	-	1	mW/cm ²
*** LIFE TEST	4.5.1		t	-	500	-	h
*** LIFETEST END POINT	AVERAGE POWER OUTPUT (1)	4.3.3.1	NOTE (7)	P _o (1)	-	710	-

SPEC. NO. :

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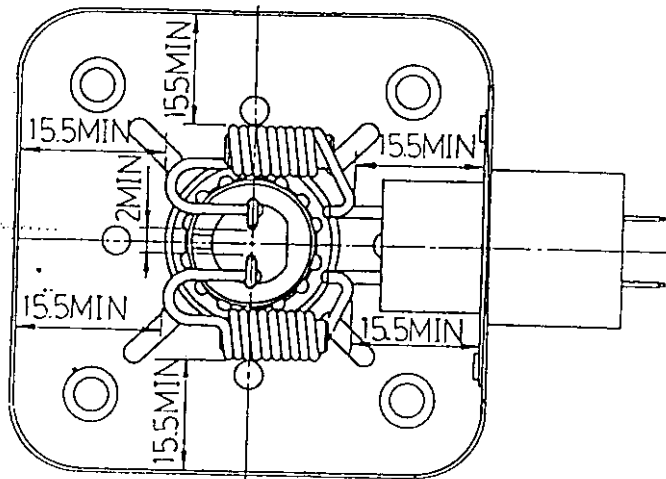
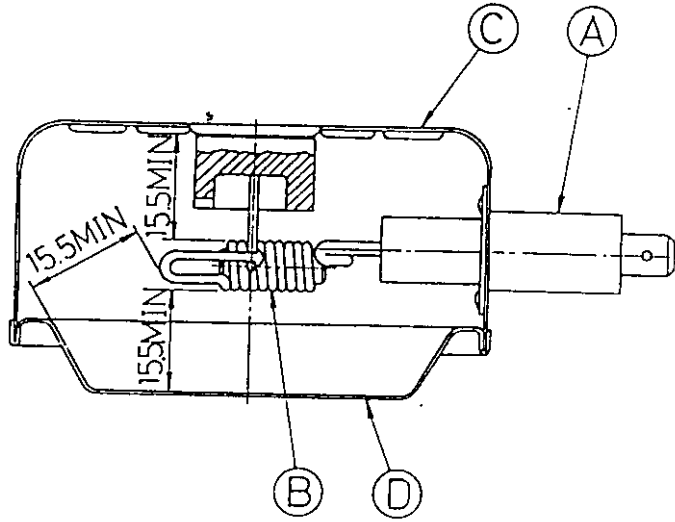
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- NOTE (1) Prescribed R.F. Coupler (Refer to the attached chart) or the similar type must be used.
- (2) Forced air cooling (1000 l/min).
- (3) Single phase full wave rectifier without filter shall be used for power supply.
- (4) See outline drawing for measuring point.
- (5) Maximum saturated anode temperature for normal condition (with load in the cavity) should be 200°C.
- (6) $E_b = 10kVdc$ or $7kVac$; $t = 60s$
- (7) The surrounding temperature will be settled at the value of 25°C and it's exchange rate should be $-0.0025^\circ C$.
- (8) Tests shall be classified as follows.

Class	Mark	Remarks
Production test	None	This test is intended to ensure if the production line is being processed in compliance with the standard, and shall be conducted on some typical characteristics which are considered to be affected by changes in the process.
Design test	∞	This test is intended to ensure the standard design, and shall be conducted on such characteristics which are not affected by the ordinary production line as long as the design is maintained.
Type approval test	∞∞∞	This test is intended to ensure the compliance of the standard design with given specifications, and may be omitted unless a substantial change in the design is made.

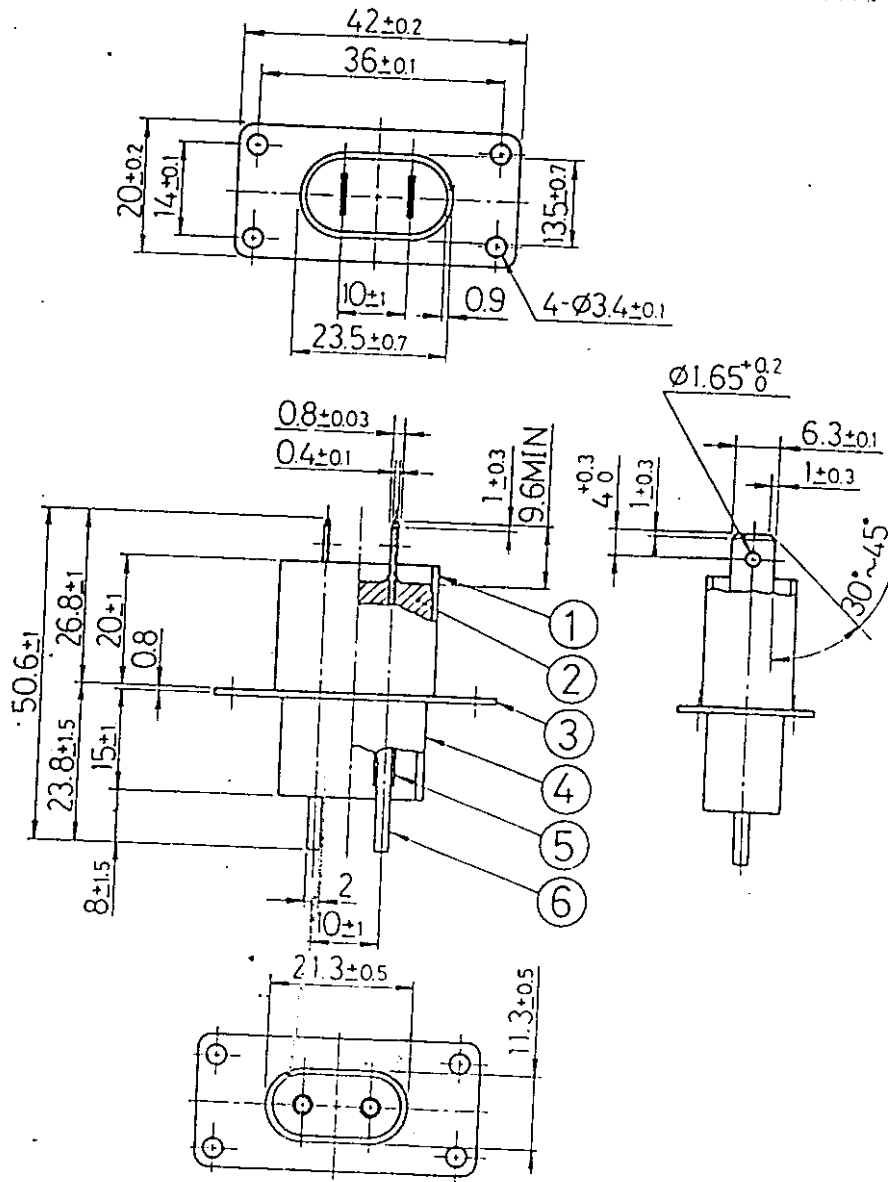
SPACING IN THE SHIELDING CASE

UNIT : mm



DETAILS OF FILTER CAPACITOR

UNIT : mm



NOTE<1> THE FASTON TAB MEETS TO BS 5057 : 1973 AND DIN 46244 : APRIL 1980.

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MATERIAL LIST

Part name	Manufacturer	Material	Manufacturer of Materials	U L - No.			Note
				Guide No.	File No.	Grade No.	
A Capacitor (HFC-2S-1)	T D K Corporation	1 Polybutylene terephthalate	Mitsubishi Rayon Co., LTD.	QMFZ2	E54695(M)	G2930	500µF ± 20% AV100V
		2 Epoxy Resin	TDK Corporation	-	-	R-2, R-3	
		3 Steel	TDK Corporation	-	-	-	
		4 Polybutylene terephthalate	Polyplastic Co., LTD.	QMFZ2	E45034(B)	3310	
		5 Silicone Rubber Tube	Shin-etsu Chemical Co., LTD. Toshiba Silicone Co., LTD.	-	-	5609 5053	
		6 Steel	TDK Corporation	-	-	-	

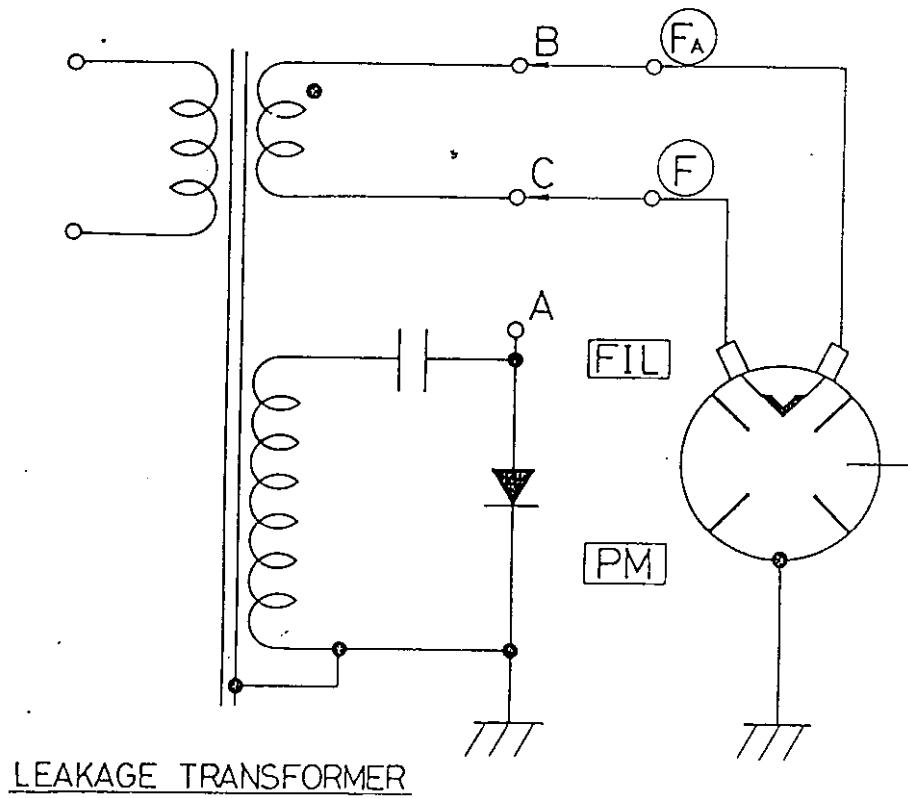
Part name	Manufacturer	Material	Thickness Diameter (mm)	Size (mm)	Note
B Choke coil	Dong An Corporation	Ferrite	-	∅5 x 16	9.5 turns 1.5 ∅1 x 2
		Enameled copper wire	∅ 1.4		
C Shielding case	Daewoo Electronics Co., LTD.	Zinc steel	T 0.4	70 x 70	
D Shielding case cover	do	do	T 0.4	71 x 71	
E Heat sink enclosure (1)	do	do	T 0.4	-	
F Heat sink	do	Aluminium	T 0.7	80 x 80	6 fins
G Heat sink enclosure (2)	do	Zinc steel	T 1.4	-	

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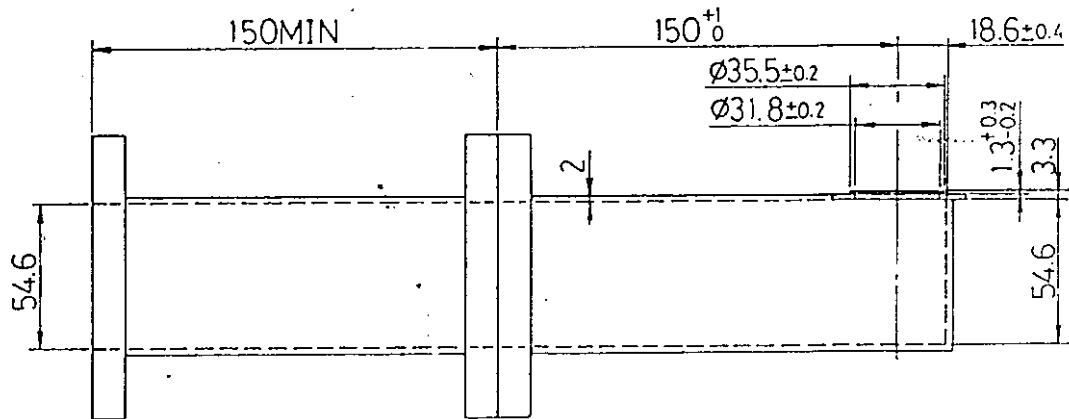
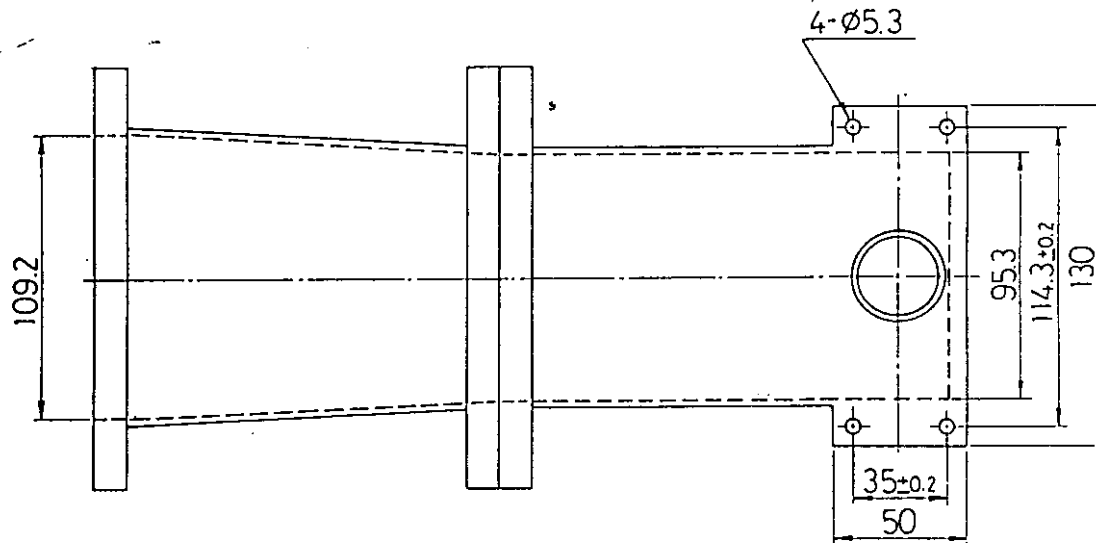
FILAMENT CONECTION



A WILL BE CONNECTED TO B OR C

R. F. COUPLER

UNIT : mm



STANDARD R.F. COUPLER DEFINED BY E.I.A.J.

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