DAEWOO
ELECTRONICS

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MAGNETRON PRODUCTION TEAM

SPECIFICATION

FOR
DAEWOO MAGNETRON
2 M 2 1 8

2M218JFP	ELECTRICAL SPECIFICATION

This specification is based upon EIAJ ED-1501 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

									NOTE(4)(5)	NOTE(4)
ABSOLUTE MAXIMUM RATINGS	TERM	Ef	tk	Ebm	Ib	Ibm	Pin	σ_L	T p	T case
	UNIT	V	sec	kV	mAdc	A	kW	-	℃	℃
	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 ED-1501	TEST CONDITION	SYMBOL	BOGIE	LIMIT MIN.	LIMIT MAX.	UNIT
※※ VIBRATION		5.4.1		-	-	-	-	-
※ BREAK DOWN VOLTAGE		4.2	NOTE (6)	-	-	-	-	-
※ INSULATION		4.2	Eb=1kVdc R.H.MAX.60%	-	-	100	-	MΩ
※ FILAMENT CURRENT		4.1.1	tk=120sec	If	10	8	12	A
PEAK ANODE VOLTAGE		4.3.1	NOTE (7)	Ebm	4.2	4.1	4.3	kV
AVERAGE POWER OUTPUT(1)		4.3.3.1	NOTE (7)	Po (1)	945	915	975	W
FREQUENCY		4.3.4		f	2458	2448	2468	MHz
※※ PULLING FIGURE		4.3.6	σ_L=1.5	fpl	-	-	15	MHz
※※ SINK PHASE		4.3.7		λsink/ λg	0.25	-	-	-
※ STABILITY MODING (1)		4.3.11.2	σ_L=2,3,4: t=60sec	-	-	-	-	-
※ FUNDAMENTAL FREQUENCY RADIATION		4.3.15	σ_L=4	Sl	-	-	1	mW/cm^2
※※ LIFE TEST		4.5.1		t	-	500	-	hour
※※ LIFETEST END POINT	AVERAGE POWER OUTPUT (1)	4.3.3.1	NOTE (7)	Po (1)	-	735	-	W

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 rectified 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 250℃.

(6) Eb=10kVdc or 7kVac : t=60sec

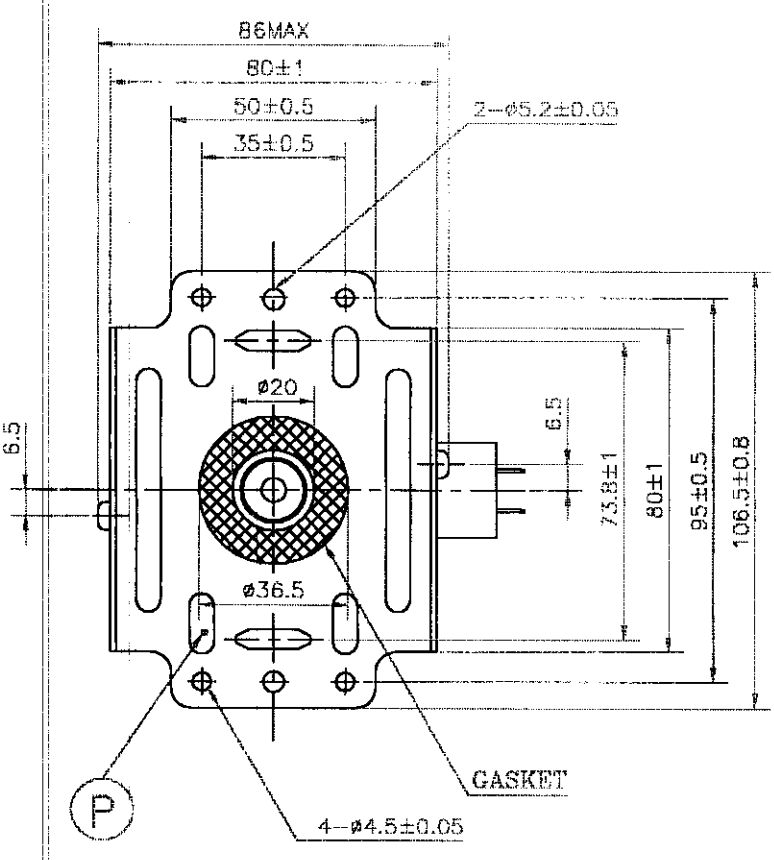
(7) The surrounding temperature will be settled at the value of 25℃ and it's exchange rate should be -0.002/℃.

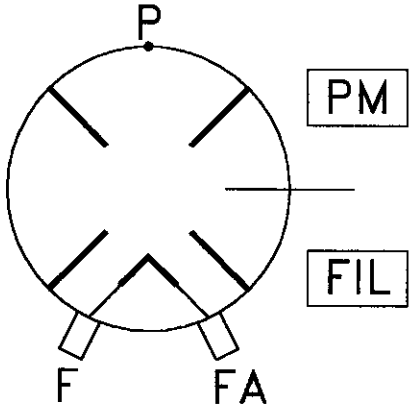
(8) Tests shall be classified as follows.

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.

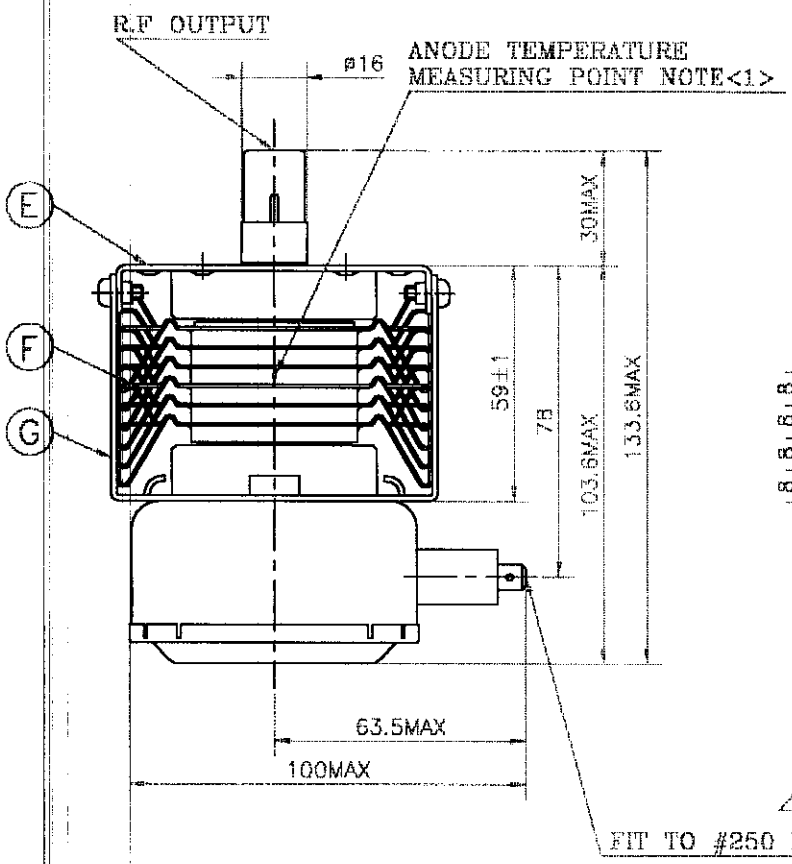
OUTLINE DRAWING

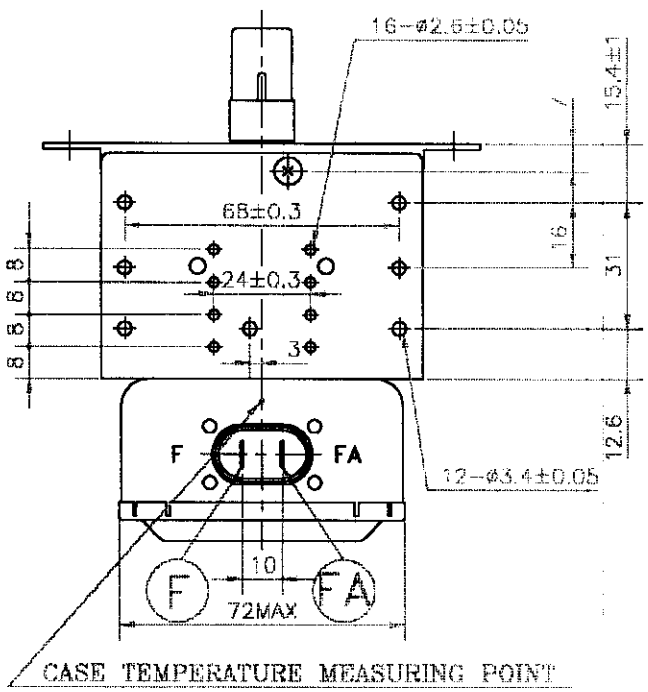
UNIT: mm





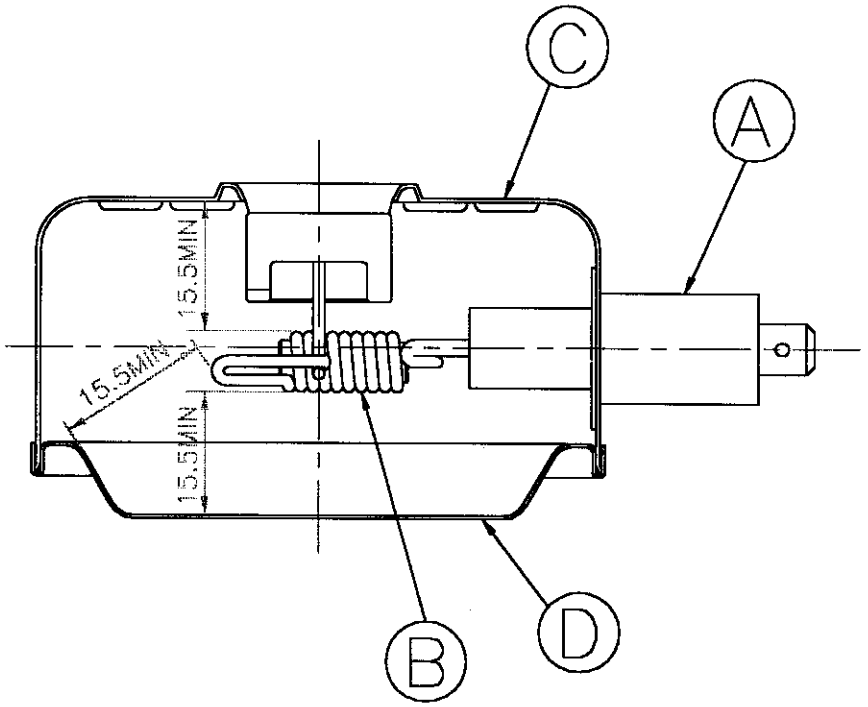
NOTE<1> TEMPERATURE TO BE MEASURED AT THE OUTLET SIDE OF AIRFLOW.

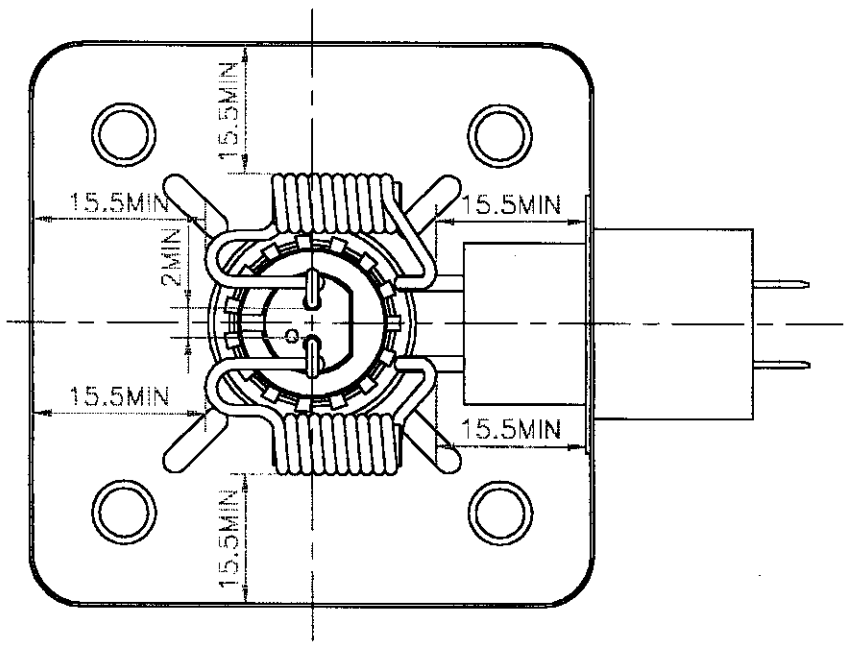




SPACING IN THE SHIELDING CASE

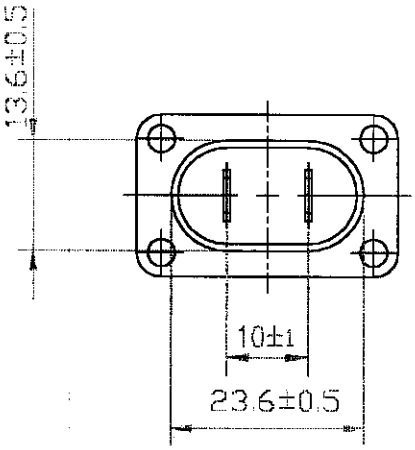
UNIT: mm

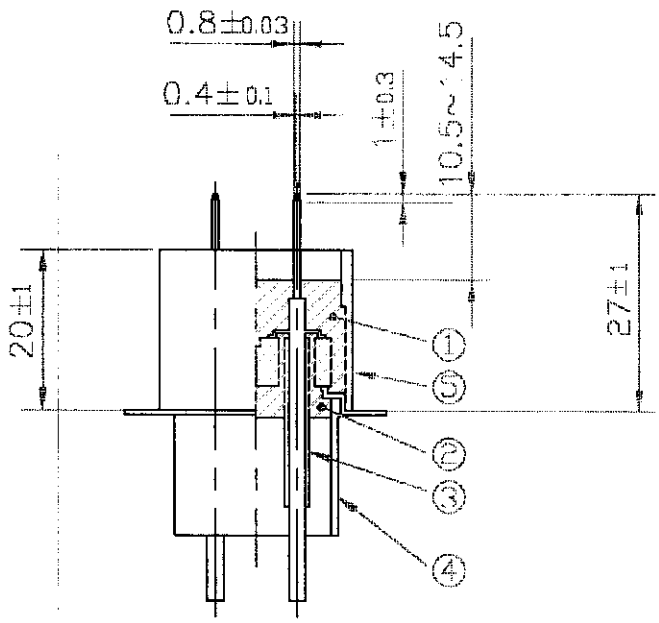


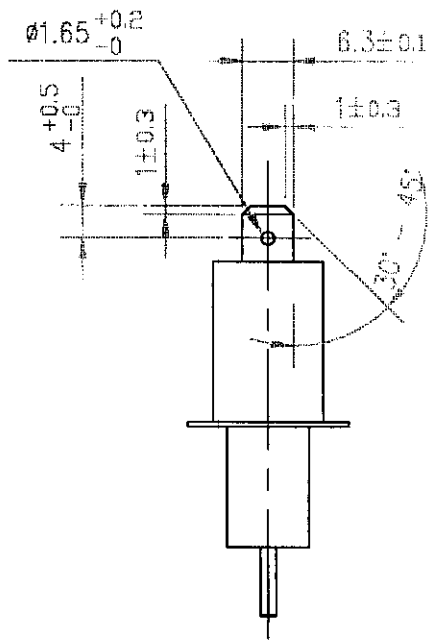


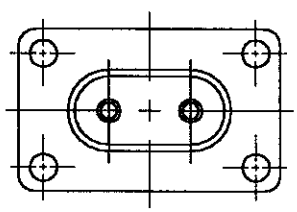
DETAILS OF FILTER CAPACITOR

UNIT : mm









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

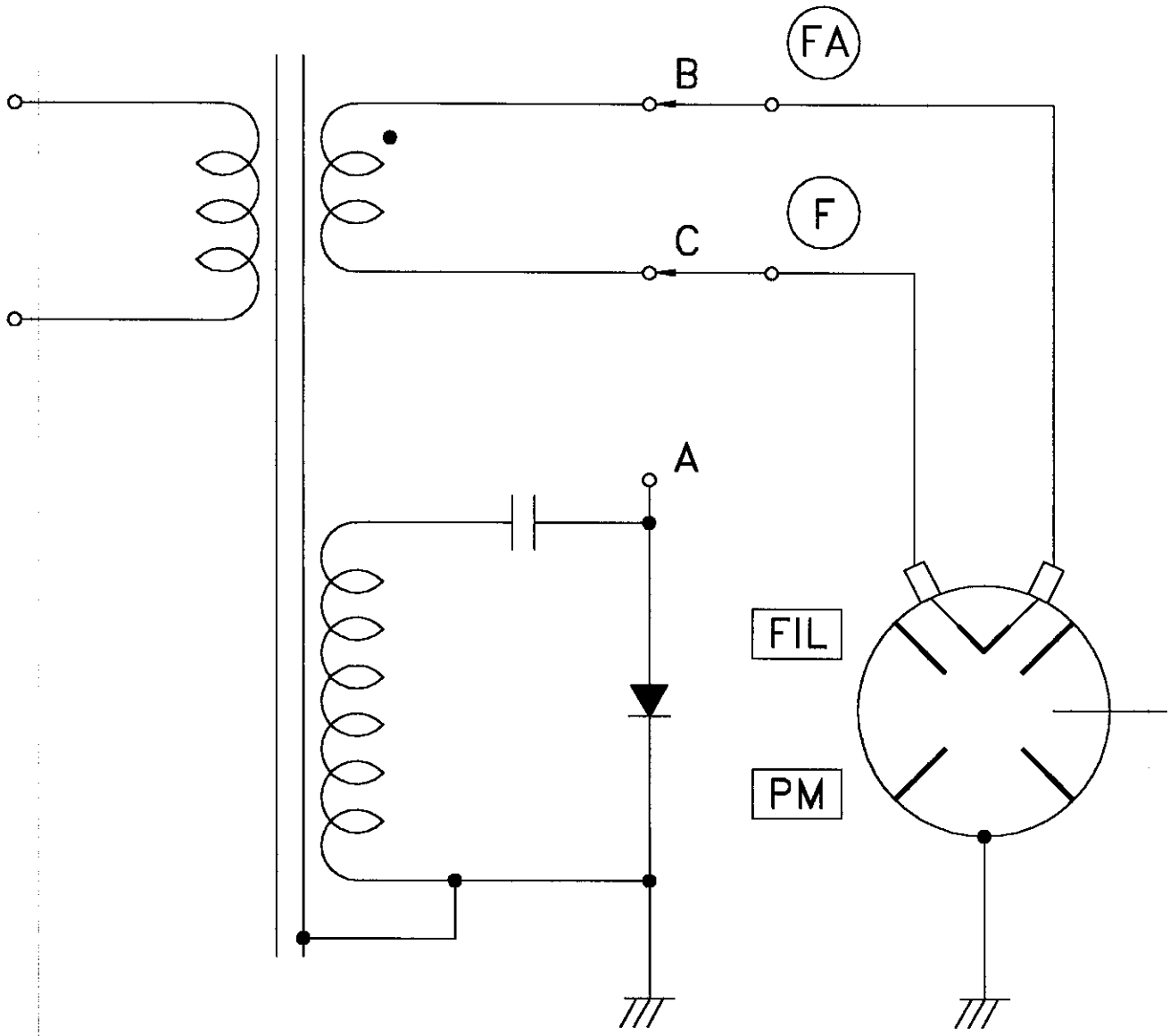
2M218JFP

MATERIAL LIST

	PART NAME	MANUFACTURER		MATERIAL	MANUFACTURER of MATERIALS	UL - No.			NOTE
						Guide No.	File No.	Grade No.	
A	Capacitor	CERACOM Co.,LTD.	1	Epoxy Resin	Ceracom Corporation	-			500pFx2 WV10KVDC
			2	Epoxy Resin	Ceracom Corporation	-			
			3	Silicon	Shin_etsu Chemical Co.,LTD.	UL224FR-1 No.5620 or 5609			
			4	PBT	Kolon Industries INC.	UL94V-0 E88499			
			5	PBT	Kolon Industries INC.	UL94V-0 E88499			
		SAMWHA CAPACITOR Co.,LTD.	1	Epoxy Resin	SAMWHA Corporation	-	-	-	
			2	Epoxy Resin	SAMWHA Corporation	-	-	-	
			3	Silicon	HAERYONG Silicone Co.,LTD.	-	E98818S	UL94V-0	
			4	PBT	LG Chemical LTD.	-	E67171M	UL94V-0	
			5	PBT	LG Chemical LTD.	-	E67171M	UL94V-0	

	PART NAME	MANUFACTURER	METERIAL	THICKNESS or DIRMETER(mm)	SIZE (mm)	NOTE
B	Choke coil	Sunjin Industrial Co.,LTD	Ferrite	-	ϕ5 x 16	9.5 turns 1.5 μH x 2
			Enameled copper wire	ϕ 1.4		
C	Shielding case	Daewoo Electronics Corp.	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 1.4	-	
F	Heat sink	do	Aluminium	T 0.7	80 x 80	6 fins
G	Heat sink enclosure (2)	do	Zinc steel	T 1.4	-	

FILAMENT CONNECTION

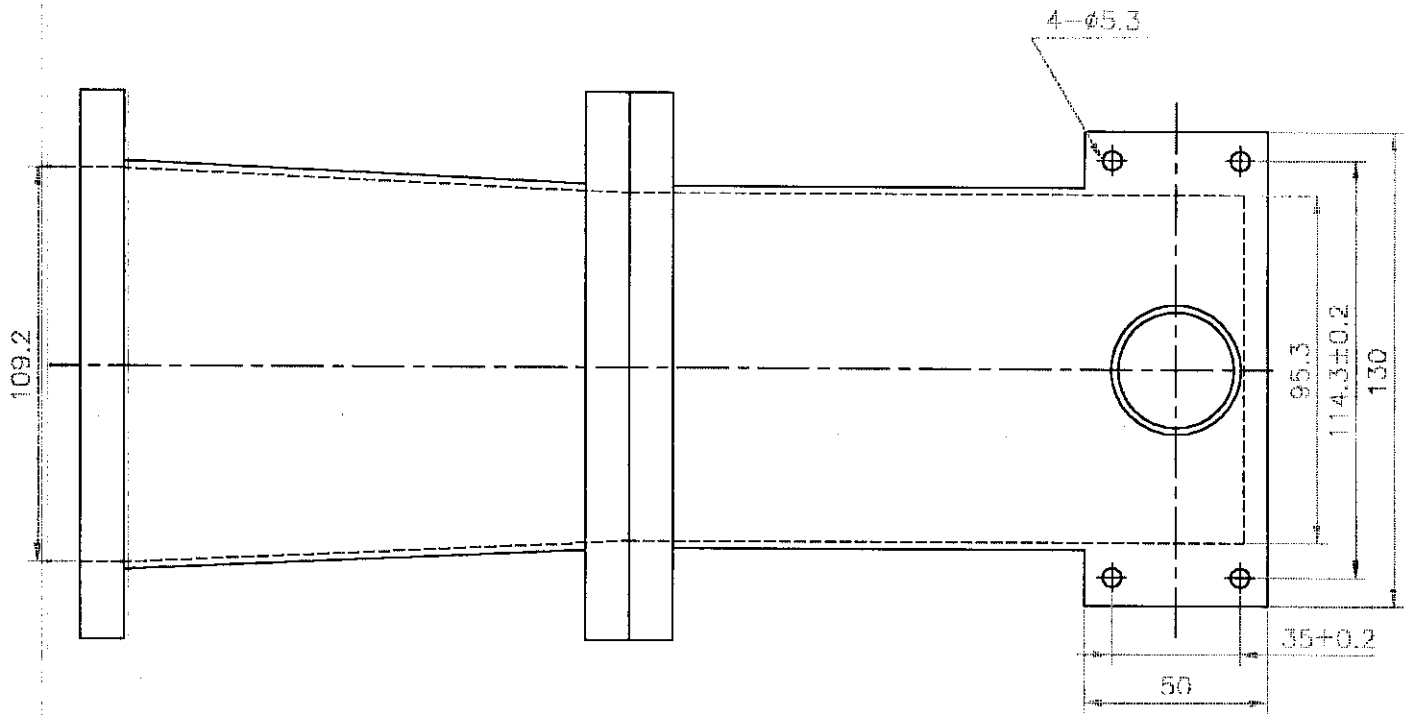


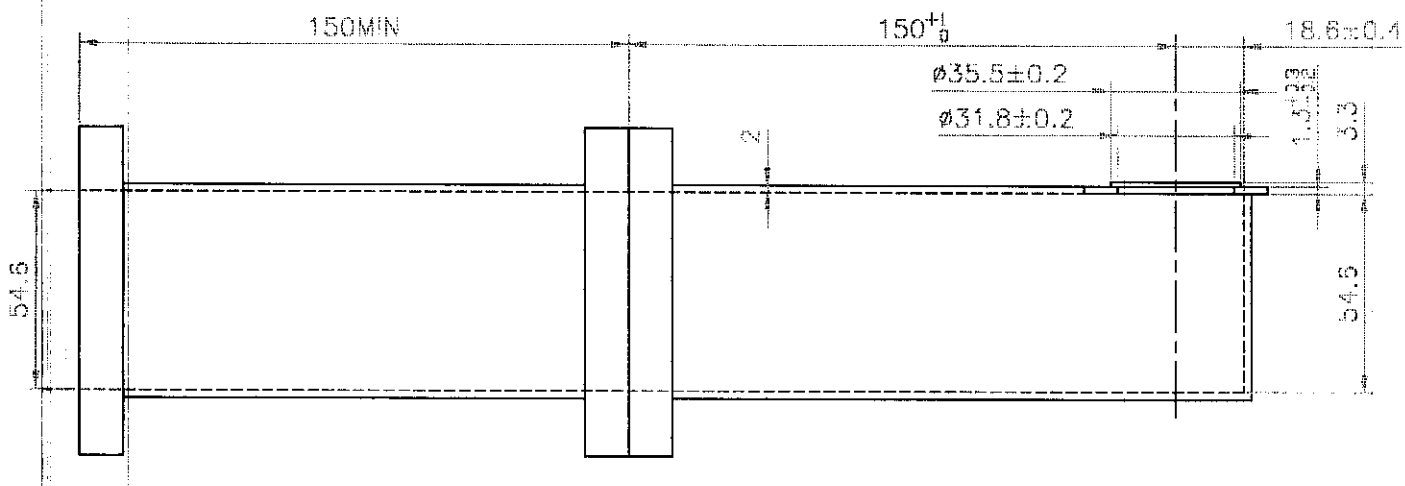
LEAKAGE TRANSFORMER

A WILL BE CONNECTED TO B OR C

R. F. COUPLER

UNIT: mm





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

SPEC.NO.:	DATE:	PAGE: 9/10

LABEL

The Label as shown below shall be put on each tube.