

SPECIFICATION

FOR
DAEWOO MAGNETRON
2 M 2 1 9 H E

2M219HE

ELECTRICAL SPECIFICATION

This specification is based upon EIAJ ED-1501 Testing Methods for Continuous Wave Magnetrons

DAEWOO CONTINUOUS WAVE MAGNETRON 2M219HE

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	Ebm	Ib	Ibm	Pin	σL	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		UNIT	
					MIN.	MAX.		
** 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	4.10	3.95	4.25	kV	
AVERAGE POWER OUTPUT (1)	4.3.3.1	NOTE (7)	Po (1)	925	885	965	W	
FREQUENCY	4.3.4		f	2458	2448	2468	MHz	
** PULLING FIGURE	4.3.6	σL = 1.5	fpl	-	-	15	MHz	
** SINK PHASE	4.3.7		λ _{sink} /λ _g	0.25	-	-	-	
* STABILITY MODING (1)	4.3.11.2	σL = 2,3,4; t = 60sec	-	-	-	-	-	
* FUNDAMENTAL FREQUENCY RADIATION	4.3.15	σL = 4	S1	-	-	1	mW/cm ²	
** LIFE TEST	4.5.1		t	-	500	-	hour	
** LIFE TEST END POINT	AVERAGE POWER OUTPUT (1)	4.3.3.1	NOTE (7)	Po (1)	-	710	-	W

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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 (800 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 °C.

In an abnormal condition (without load in the cavity), the maximum allowable temperature for anode is 300 °C, provided that the operation time does not exceed 30 minutes per operation and the dwell time at the anode temperature 250 ~ 300°C does not exceed 25 hours in total.

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

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

