

MODEL: MS-300-2K

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	RIPPLE & NOISE	V1: 300 mVp-p (Max)	I/P: 230VAC O/P:FULL LOAD Ta:25°C	V1: 38 mVp-p (Max)	P
2	OUTPUT VOLTAGE ADJUST RANGE	CH1: 40V~ 53 V	I/P: 230 VAC I/P: 115 VAC O/P:MIN LOAD Ta:25°C	38.35 V~ 57.6 V/ 230 VAC 38.35 V~ 57.6 V/ 115 VAC	P
3	OUTPUT VOLTAGE TOLERANCE	V1: 1 %~ -1 % (Max)	I/P: 85 VAC / 264 VAC O/P:FULL/ MIN LOAD Ta:25°C	V1: 0.015 %~ -0.015 %	P
4	LINE REGULATION	V1: 0.2 %~ -0.2 % (Max)	I/P: 85 VAC ~ 264 VAC O/P:FULL LOAD Ta:25°C	V1: 0.015 %~ -0.015 %	P
5	LOAD REGULATION	V1: 1 %~ -1 % (Max)	I/P: 230 VAC O/P:FULL ~MIN LOAD Ta:25°C	V1: 0.015 %~ -0.015 %	P
6	SET UP TIME	230VAC: 1500 ms (Max)	I/P: 230 VAC I/P: 115 VAC O/P:FULL LOAD Ta:25°C	230VAC/ 817 ms	P
7	RISE TIME	230VAC: 50 ms (Max)	I/P: 230 VAC I/P: 115 VAC O/P:FULL LOAD Ta:25°C	230VAC/ 38 ms	P
8	HOLD UP TIME	230VAC: 20 ms (TYP)	I/P: 230 VAC I/P: 115 VAC O/P:FULL LOAD Ta:25°C	230VAC/ 62 ms	P
9	OVER/UNDERSHOOT TEST	< ±5%	I/P: 230 VAC O/P:FULL LOAD Ta:25°C	TEST: <5 %	P
10	DYNAMIC LOAD	V1: 4800 mVp-p	I/P: 230 VAC O/P:FULL /Min LOAD 90%DUTY/1KHZ Ta:25°C	345 mVp-p	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	INPUT VOLTAGE RANGE	85VAC~264 VAC	I/P: TESTING O/P: FULL LOAD Ta: 25°C	56 V~264V	P
			I/P: LOW-LINE-3V= 82 V HIGH-LINE+15%=300 V O/P: FULL/MIN LOAD ON: 30 Sec . OFF: 30 Sec 10MIN (AC POWER ON/OFF NO DAMAGE)	TEST: OK	
2	INPUT FREQUENCY RANGE	47HZ ~63 HZ NO DAMAGE OSC	I/P: 85 VAC ~ 264 VAC O/P: FULL~MIN LOAD Ta: 25°C	TEST: OK	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	116 %~ 150 %	I/P: 230 VAC I/P: 115 VAC O/P: TESTING Ta: 25°C	128 %/ 230 VAC 128 %/ 115 VAC Constant Current Limiting	P
2	OVER VOLTAGE PROTECTION	CH1: 53.1 V~ 60 V	I/P: 230 VAC I/P: 115 VAC O/P: MIN LOAD Ta: 25°C	57.8 V/ 230 VAC 57.8 V/ 115 VAC Shunt down Re- power ON	P
3	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P: 264 VAC O/P: FULL LOAD Ta: 25°C	NO DAMAGE Constant Current Limiting	P

CONTROL FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	REMOTE CONTROL	Rc+ / Rc- open or 0V~0.8V POWER ON 4V~12V POWER OFF	I/P: 230 VAC O/P: FULL LOAD Ta: 25°C	open or 0V ~ 2.6V POWER ON 2.7V ~ 12V POWER OFF	P
2	CURRENT SHARING	PSU1-PSU2 < 10%	I/P: 230 VAC O/P: FULL/50% LOAD Ta: 25°C	O/P: 100% PSU1: 329 W PSU2: 320 W	P
				O/P: 50% PSU1: 171 W PSU2: 161 W	

SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P: 3 KVAC/min I/P-FG: 1.5 KVAC/min O/P-FG: 0.5 KVAC/min	I/P-O/P: 3.6 KVAC/min I/P-FG: 1.8 KVAC/min O/P-FG: 0.6 KVAC/min Ta:25℃	I/P-O/P: 6.48 mA I/P-FG: 5.36 mA O/P-FG: 6.05 mA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ I/P-FG: 500VDC>100MΩ O/P-FG:500VDC>100MΩ	I/P-O/P: 500 VDC I/P-FG: 500 VDC O/P-FG: 500 VDC Ta:25℃	I/P-O/P: 1 GΩ I/P-FG: 1 GΩ O/P-FG: 1 GΩ NO DAMAGE	P

E.M.C TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	HARMONIC	EN61000-3-2 CLASS A	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25℃	PASS	P
2	CONDUCTION	EN55022 CLASS B	I/P: 230 VAC (50HZ) O/P:FULL/50% LOAD Ta:25℃	PASS Test by certified Lab	P
3	RADIATION	EN55022 CLASS B	I/P: 230 VAC (50HZ) O/P:FULL LOAD Ta:25℃	PASS Test by certified Lab	P
4	E.S.D	EN61000-4-2 LIGHT INDUSTRY AIR:8KV / Contact:4KV	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A	P
5	E.F.T	EN61000-4-4 LIGHT INDUSTRY INPUT: 1KV	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A	P
6	SURGE	IEC61000-4-5 LIGHT INDUSTRY L-N :1KV L,N-PE:2KV	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A	P
7	Test by certified Lab & Test Report Prepare				

COMPONENT STRESS TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	Power Transistor (D to S) or (C to E) Peak Voltage	Q 302 Rated IRFP450 : 500 V 14 A	I/P:High-Line +3V = 267 V O/P: (1)Full Load Turn on (2) Full Load (3)Output Short Ta:25°C	(1) 296 V (2) 418 V (3) 392 V	P
2	Diode Peak Voltage	D351 Rated S20LC40 : 400 V 20 A	I/P:High-Line +3V = 267 V O/P: (1)Full Load Turn on (2) Full Load (3)Output Short Ta:25°C	(1) 235 V (2) 218 V (3) 269 V	P
3	Input Capacitor Voltage	C14 Rated : 330 u / 450 V/ 105°C	I/P:High-Line +3V = 267 V O/P: (1)Full Load Turn on /Off (2) Min load Turn on /Off (3)Full Load /Min load Change Ta:25°C	(1) 434 V (2) 434 V (3) 426 V	P
4	Control IC Voltage Test	U202 Rated TL3845 : 30 V	I/P:High-Line +3V = 267 V O/P: (1)Full Load Turn on /Off (2) Min load Turn on /Off (3)Full Load /Min load Change Ta:25°C	(1) 13.4 V (2) 13.4 V (3) 13.4 V	P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2004/7/29	RD SAMPLE	PASS	VINCENT TSENG	MAX LIN
2004/11/3	PRODUCT SAMPLE W0408B42	PASS	VINCENT TSENG	MAX LIN
2005/6/1	PRODUCT SAMPLE W0504B38	PASS	VINCENT TSENG	MAX LIN

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