



(MPM-45)





(MPM-45-xxST)



ANSI/AAMI ES60601-1 BS EN/EN60601-1 IEC60601-1

Features

- 3.43"x2.05" compact size
- · PCB chassis or screw terminal mounting version
- · Medical safety approved (2 x MOPP) according to ANSI/AAMI ES60601-1 and IEC/BS EN/EN60601-1
- · Suitable for BF application with appropriate system consideration
- No load power consumption<0.1W
- Extremely low leakage current
- Wide operating temp. range -30 ~ +80°C
- EMI Class B without additional components
- Isolation Class ∏
- · Protections: Short circuit / Overload / Over voltage
- No minimum load required
- Operating altitude up to 4000 meters(Note.7)
- 50W peak(10 sec.)
- · 3 years warranty

Description

MPM-45 is a 45W high density and small size (87x52x29.5mm) AC/DC PCB-mount type medical grade power supply. It features the operation for 80~264VAC, a low no load power consumption less than 0.1W, a high efficiency up to 92.5%, Class II (no FG) double insulation, outstanding dissipation, 2~5G anti-vibration by model, high EMC performance, 4KVAC isolation, etc. The design observes IEC/BS EN/EN60601-1 and ANSI/AAMI ES60601-1version three with 2 x MOPP level and ultra-low leakage current (<100µA). It is very suitable for BF (patient contact) type medical device or relevant equipment.





Blank : PCB mounting style ST : Screw terminal style



Applications

- · Portable medical device
- Mobile clinical workstation
- · Medical computer monitor
- Medical examination instrument





SPECIFICATION

			MPM-45-5	MPM-45-12	MPM-45-15	MPM-45-24	MPM-45-48
	DC VOLTA	GE	5V	12V	15V	24V	48V
OUTPUT		Peak(10 sec.)	8.8A	4.13A	3.3A	2.1A	1.05A
	CURRENT	Convection	8A	3.75A	3A	1.88A	0.94A
	RATED	Peak(10 sec.)Note.2	44W	49.5W	49.5W	50.4W	50.4W
	POWER	Convection	40W	45W	45W	45.1W	45.1W
	RIPPLE & NOISE (max.) Note.3			120mVp-p	120mVp-p	200mVp-p	240mVp-p
	VOLTAGE TOLERANCE Note.4			±2.0%	±2.0%	±2.0%	±2.0%
			±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION		±1.0%	±1.0%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME		1000ms, 30ms/230VAC 1000ms, 30ms/115VAC at full load				
	HOLD UP TIME (Typ.)		50ms/230VAC 12ms/115VAC at full load				
INPUT							
			47 ~ 63Hz	04.5%	00.50	00.5%	0001
	EFFICIENCY (Typ.)		88%	91.5%	92.5%	92.5%	92%
	AC CURRENT (Typ.)		1.2A/115VAC 0.6A/230VAC				
	INRUSH CURRENT (Typ.)		COLD START 30A/115VAC 60A/230VAC				
	LEAKAGE CURRENT (max.) Note.6		5 Touch current <100μA/264VAC				
	OVERLOAD		115% ~ 135% rated outp	•			
			Protection type : Hiccup mode, recovers automatically after fault condition is removed				
PROTECTION	OVER VOLTAGE		5.3 ~ 7.2V	12.6 ~ 16.2V	15.8 ~ 20.3V	25.2 ~ 32.4V	50.4 ~ 64.8V
			Protection type : Shut down o/p voltage, re-power on to recover				
			Protection type : Shut down o/p voltage, re-power on to recover				
ENVIRONMENT	WORKING TEMP.		-30 ~ +80°C (Refer to "Derating Curve")				
	WORKING HUMIDITY		20 ~ 90% RH non-condensing				
	STORAGE TEMP.		-40 ~ +85°C				
	TEMP. COEFFICIENT		±0.03%/°C (0~60°C)				
	SOLDERING TEMPERATURE						
	VIBRATION		Blank:10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
			ST:10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes				
	OPERATING ALTITUDE Note.7		IEC60601-1, BS EN/EN60601-1, EAC TP TC 004, UL ANSI/AAMI ES60601-1(3.1 version), CAN/CSA-C22 3 rd Edition approved;				
	0. 2.0					1 1/2 1 upraion) CAN/CC	
	SAFETY ST					1-1(3.1 version), CAN/CS/	A-C22 3 rd Edition approved;
	-	ANDARDS	IEC60601-1, BS EN/EN6 Design refer to BS EN/E Primary-Secondary: 2xM	N60335-1(by request		1-1(3.1 version), CAN/CS/	A-C22 3 rd Edition approved;
	SAFETY ST	ANDARDS	Design refer to BS EN/E	N60335-1(by request		1-1(3.1 version), CAN/CS/	A-C22 3 rd Edition approved;
	SAFETY ST ISOLATION WITHSTAN	ANDARDS	Design refer to BS EN/E Primary-Secondary: 2xM	N60335-1(by request) IOPP)	1-1(3.1 version), CAN/CS/	A-C22 3 rd Edition approved;
	SAFETY ST ISOLATION WITHSTAN	ANDARDS I LEVEL D VOLTAGE	Design refer to BS EN/E Primary-Secondary: 2xN I/P-O/P:4KVAC	N60335-1(by request) IOPP 0VDC / 25°C/ 70% RI)	1-1(3.1 version), CAN/CS/	
	SAFETY ST ISOLATION WITHSTAN	ANDARDS I LEVEL D VOLTAGE	Design refer to BS EN/E Primary-Secondary: 2xM I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50	N60335-1(by request) IOPP 0VDC / 25°C / 70% RI S) H tandard	Test Level	
	SAFETY ST ISOLATION WITHSTAN ISOLATION	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xM I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted	N60335-1(by request IOPP 0VDC / 25°C / 70% RI S B) H tandard S EN/EN55011 (CISPR11)	Test Level Class B	
	SAFETY ST ISOLATION WITHSTAN	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated	N60335-1(by request IOPP 0VDC / 25°C/ 70% RI 8 B B) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11)	Test Level Class B Class B	
	SAFETY ST ISOLATION WITHSTAN ISOLATION	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current	N60335-1(by request IOPP 0VDC / 25°C / 70% RI 8 8 8 8 8 8 8) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2	Test Level Class B	
	SAFETY ST ISOLATION WITHSTAN ISOLATION	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker	N60335-1(by request IOPP 0VDC / 25°C / 70% RI B B B B B B B B B B B B B B B B B B B) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11)	Test Level Class B Class B	
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN	N60335-1(by request IOPP 0VDC / 25°C / 70% RI 8 8 8 8 8 8 8 8 8 8) tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3	Test Level Class B Class A 	/ Note
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter	N60335-1(by request IOPP 0VDC / 25°C/ 70% RI 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8) tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard	Test Level Class B Class A Class A Test Level	/ Note
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN	N60335-1(by request IOPP 0VDC / 25°C/ 70% RI 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8) tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3	Test Level Class B Class A Class A Test Level Level 4, 151	/ Note / Note / Note KV air ; Level 4, 8KV contact
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter	N60335-1(by request IOPP 0VDC / 25°C / 70% RI 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8) tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard	Test Level Class B Class A Test Level Level 4, 151 Level 3, 10	/ Note / Note / Note KV air ; Level 4, 8KV contact V/m(80MHz~2.7GHz)
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility	N60335-1(by request IOPP 0VDC / 25°C/ 70% RI 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8) H tandard S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3	Test Level Class B Class A Test Level Level 4, 151 Level 3, 10 Table 9, 9-2	/ Note / Note KV air ; Level 4, 8KV contact V/m(80MHz~2.7GHz) 28V/m(385MHz~5.78GHz)
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts	N60335-1(by request) IOPP 0VDC / 25°C/ 70% RI 8 8 8 8 8 1/EN60601-1-2 8 8 8 1/EN60601-1-2 8 8 8 8 8 8 8 8 8 8 8 8 8) H tandard S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-4	Test Level Class B Class B Class A Test Level Level 4, 151 Level 3, 10 Table 9, 9-7 Level 3, 2K	/ Note / Note KV air ; Level 4, 8KV contact V/m(80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility	N60335-1(by request IOPP 0VDC / 25°C/ 70% RI 8 8 8 8 /EN60601-1-2 8 8 8 8 8 8 8 8 8 8 8 8 8) H tandard S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5	Test Level Class B Class B Class A Test Level Level 4, 151 Level 3, 10 Table 9, 9-7 Level 3, 2K Level 3, 1K	/ Note / Note / Vote &V air ; Level 4, 8KV contact //m(80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility	N60335-1(by request IOPP 0VDC / 25°C / 70% RI B B B B B B B B B B B B B) H tandard S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5 S EN/EN61000-4-6	Test Level Class B Class B Class A Test Level Level 4, 151 Level 3, 10 Table 9, 9-5 Level 3, 2K Level 3, 10	/ Note / Note / Note KV air ; Level 4, 8KV contact //m(80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line V
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility	N60335-1(by request IOPP 0VDC / 25°C / 70% RI B B B B B B B B B B B B B) H tandard S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5	Test Level Class B Class B Class A Test Level Level 4, 151 Level 3, 100 Table 9, 9-/ Level 3, 2K Level 3, 1K Level 3, 100 Level 4, 300	/ Note / Note / Vote KV air ; Level 4, 8KV contact V/m(80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line V A/m
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility	N60335-1(by request IOPP 0VDC / 25°C / 70% RI B B B B /EN60601-1-2 S B B B B B B B B B B B B B) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-8	Test Level Class B Class B Class A Test Level Level 4, 151 Level 3, 10 Table 9, 9-7 Level 3, 2K Level 3, 1K Level 3, 10 Level 4, 30, >95% dip 0	/ Note / Note // Note KV air ; Level 4, 8KV contact //m(80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line V A/m .5 periods, 30% dip 25 period
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS	ANDARDS I LEVEL D VOLTAGE I RESISTANCE	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility Magnetic field immunity Voltage dip, interruption	N60335-1(by request IOPP OVDC / 25°C / 70% RI B B B B B B B B B B B B B) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-11	Test Level Class B Class B Class A Test Level Level 4, 151 Level 3, 10' Table 9, 9-7 Level 3, 2K Level 3, 1K Level 3, 10' Level 4, 30, >95% dip 0 >95% inter	/ Note / Note / Vote KV air ; Level 4, 8KV contact V/m(80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line V A/m
EMC Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC IMMU	ANDARDS I LEVEL D VOLTAGE I RESISTANCE SION	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility Magnetic field immunity Voltage dip, interruptior 4590.4K hrs min. Telc	N60335-1(by request) IOPP 0VDC / 25°C / 70% RI B) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-8 S EN/EN61000-4-11 re) ; 563.4K hrs min. MIL-	Test Level Class B Class B Class A Test Level Level 4, 151 Level 3, 10 Table 9, 9-4 Level 3, 10 Table 9, 9-4 Level 3, 10 Table 9, 9-4 Level 3, 10 Table 9, 9-5 Level 3, 10 Level 4, 30, >95% dip 0 >95% interr HDBK-217F (25°C)	/ Note / Note / Note KV air ; Level 4, 8KV contact V/m(80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line V A/m .5 periods, 30% dip 25 periods
EMC Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC IMMU	ANDARDS I LEVEL D VOLTAGE I RESISTANCE SION	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility Magnetic field immunity Voltage dip, interruptior 4590.4K hrs min. Telc PCB mounting style : 87 ^t	N60335-1(by request IOPP 0VDC / 25°C / 70% RI B B B B B /EN60601-1-2 S B /EN60601-1-2 S B B B B B B B B B B B B B) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-8 S EN/EN61000-4-11 re) ; 563.4K hrs min. MIL- Screw termina	Test Level Class B Class A Test Level Level 4, 151 Level 3, 10' Table 9, 9-4' Level 3, 10' Test Level Level 3, 10' Level 3, 10' Table 9, 9-4' Level 3, 10' Sevel 3, 11' Level 4, 30' >95% interr HDBK-217F (25°C) I style : 109*52*33.5mm (L	/ Note / Note / Note KV air ; Level 4, 8KV contact V/m(80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line V A/m .5 periods, 30% dip 25 period uptions 250 periods *W*H)
EMC Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC IMMU MTBF DIMENSION PACKING	ANDARDS ILEVEL D VOLTAGE I RESISTANCE SION	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility Magnetic field immunity Voltage dip, interruptior 4590.4K hrs min. Telc PCB mounting style : 0.1	N60335-1(by request) IOPP 0VDC / 25°C / 70% RI B B B B B B B B B B B B B P B Cordia SR-332 (Bellcon '52*29.5mm (L*W+I)) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-3 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-6 S EN/EN61000-4-7 S EN/EN61000-4-11 re) ; 563.4K hrs min. MIL- Screw termina 0.94CUFT Screw termina	Test Level Class B Class B Class A Test Level Level 3, 10° Table 9, 9-4 Level 3, 10° Table 9, 9-4 Level 3, 10° Test Level Level 3, 10° Table 9, 9-4 Level 3, 10° Table 9, 9-4 Level 3, 10° System 3, 10° Level 4, 30, 95% inter >95% inter HDBK-217F (25°C) I style : 109*52*33.5mm (L I style : 0.206Kg;50pcs/11.	/ Note / Note / Note KV air ; Level 4, 8KV contact V/m(80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line V A/m .5 periods, 30% dip 25 period uptions 250 periods *W*H)
EMC Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC EMISS EMC IMMU MTBF DIMENSION PACKING 1. All para	ANDARDS ILEVEL D VOLTAGE IRESISTANCE SION NITY Neters NOT specia	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility Magnetic field immunity Voltage dip, interruption 4590.4K hrs min. Telc PCB mounting style : 0.1	N60335-1(by request) IOPP 0VDC / 25°C / 70% RI B B B B B B B B B B B JEN60601-1-2 S B JOE B JEN60602 B JEN60602 B SE B JEN60602 SE B JEN60602 JEN60602 SE B SE B SE B SE B <) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-3 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-6 S EN/EN61000-4-7 S EN/EN61000-4-8 S EN/EN61000-4-11 re) ; 563.4K hrs min. MIL- Screw termina 0.94CUFT Screw termina , rated load and 25°C of an	Test Level Class B Class B Class A Test Level Level 4, 151 Level 3, 10' Table 9, 9-4' Level 3, 10' Table 9, 9-4' Level 3, 10' Test Level Level 3, 10' Table 9, 9-4' Level 3, 10' Table 9, 9-4' Level 3, 10' Level 3, 10' Level 4, 30, 95% interr >95% interr HDBK-217F (25°C) I style : 109*52*33.5mm (L I style : 0.206Kg;50pcs/11. nbient temperature.	/ Note / Note / Note KV air ; Level 4, 8KV contact V/m(80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line V A/m .5 periods, 30% dip 25 period uptions 250 periods *W*H)
EMC (Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC EMISS EMC IMMU MTBF DIMENSION PACKING 1. All para 2. 33% Du	ANDARDS ILEVEL D VOLTAGE IRESISTANCE SION NITY meters NOT specia ty cycle maximum	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility Magnetic field immunity Voltage dip, interruption 4590.4K hrs min. Telc PCB mounting style : 87 PCB mounting style : 0.1 Ily mentioned are measu	N60335-1(by request) IOPP 0VDC / 25°C / 70% RI S B B B B B B B B B B /EN60601-1-2 S B /EN60601-1-2 S B y B y B ordia SR-332 (Bellcor *52*29.5mm (L*W*H) 85Kg;60pcs/12.1Kg/c red at 230VAC input, Average output pow) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-6 S EN/EN61000-4-11 re) ; 563.4K hrs min. MIL- Screw termina 0.94CUFT Screw termina rated load and 25°C of an er should not exceed the rate	Test Level Class B Class A Test Level Level 3, 10' Table 9, 9-3' Level 3, 10' Table 9, 9-3' Level 3, 10' Table 9, 9-3' Level 3, 10' Level 3, 10' Level 4, 15! Level 3, 10' Level 3, 10' Level 4, 30, >95% dip 0 >95% interr ·HDBK-217F (25°C) I style : 109*52*33.5mm (L I style : 0.206Kg;50pcs/11. nbient temperature. ated power.	/ Note / Note / Note // Note // Mote // Mote /
EMC (Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC EMISS EMC IMMU MTBF DIMENSION PACKING 1. All para 2. 33% Du 3. Ripple &	ANDARDS I LEVEL D VOLTAGE I RESISTANCE SION NITY Meters NOT specia ty cycle maximum & noise are measure	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility Conducted susceptibility Magnetic field immunity Voltage dip, interruption 4590.4K hrs min. Telc PCB mounting style : 87' PCB mounting style : 0.1 Ily mentioned are measu within every 30 seconds.	N60335-1(by request) IOPP 0VDC / 25°C / 70% RI S B B B B B B B B B JEN60601-1-2 S B JEN60601-1-2 S B JEN60601-1-2 S B JENE B JENE B Ordia SR-332 (Bellcon *52*29.5mm (L*W*H) 85Kg;60pcs/12.1Kg/c red at 230VAC input; Average output pow h by using a 12" twist) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-3 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-6 S EN/EN61000-4-11 re) ; 563.4K hrs min. MIL- Screw termina 0.94CUFT Screw termina rated load and 25°C of an er should not exceed the ra stad pair-wire terminated wi	Test Level Class B Class A Test Level Level 3, 10' Table 9, 9-3' Level 3, 10' Table 9, 9-3' Level 3, 10' Table 9, 9-3' Level 3, 10' Level 3, 10' Level 4, 15! Level 3, 10' Level 3, 10' Level 4, 30, >95% dip 0 >95% interr ·HDBK-217F (25°C) I style : 109*52*33.5mm (L I style : 0.206Kg;50pcs/11. nbient temperature. ated power.	/ Note / Note / Note // Note // Mote // Mote /
EMC (Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC EMISS EMC IMMU MTBF DIMENSION PACKING 1. All para 2. 33% Du 3. Ripple & 4. Tolerand	ANDARDS ILEVEL D VOLTAGE IRESISTANCE SION NITY Meters NOT specia ty cycle maximum a noise are measur ce : includes set up	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility Conducted susceptibility Magnetic field immunity Voltage dip, interruption 4590.4K hrs min. Telc PCB mounting style : 87' PCB mounting style : 87' PCB mounting style : 0.1 Ily mentioned are measu within every 30 seconds.	N60335-1(by request) IOPP 0VDC / 25°C / 70% RI S B B B B B B B B B B /EN60601-1-2 S B /EN60601-1-2 S B y B y B ordia SR-332 (Bellcon *52*29.5mm (L*W*H) 85Kg;60pcs/12.1Kg/(red at 230VAC input, Average output pow ho yusing a 12" twis and load regulation.) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-3 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-6 S EN/EN61000-4-11 re) ; 563.4K hrs min. MIL- Screw termina 0.94CUFT Screw termina rated load and 25°C of an er should not exceed the ra stad pair-wire terminated wi	Test Level Class B Class A Test Level Level 3, 10' Table 9, 9-2' Level 3, 10' Table 9, 9-2' Level 3, 10' Test Level Value 4, 151 Level 3, 10' Level 3, 11' Level 3, 10' Level 4, 30' >95% dip 0 >95% interr 'HDBK-217F (25°C) I style : 109*52*33.5mm (L I style : 0.206Kg;50pcs/11.: nbient temperature. ated power. th a 0.1 μ F & 47 μ F para	/ Note / Note / Note // Note // Mote // Mote /
SAFETY & EMC (Note 8) OTHERS	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC EMISS EMC IMMU MTBF DIMENSIOI PACKING 1. All para 2. 33% DL 3. Ripple & 4. Toleranu 5. Derating	ANDARDS ILEVEL D VOLTAGE IRESISTANCE SION NITY Meters NOT specia ty cycle maximum a noise are measur ce : includes set up g may be needed u	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility Conducted susceptibility Magnetic field immunity Voltage dip, interruption 4590.4K hrs min. Telc PCB mounting style : 87' PCB mounting style : 87' PCB mounting style : 0.1 Ily mentioned are measu within every 30 seconds.	N60335-1(by request) IOPP 0VDC / 25°C / 70% RI S B B B B B B B B B JEN60601-1-2 S B JEN60603-1-1-2 S B JEN60603-1-1-2 B B JEN60603-1-1-2 B JEN60603 B JEN60603 B JEN60603 B Strain B Ordia SR-332 (Bellcon '52*29.5mm (L*W*H) 85K9;60pcs/12.1Kg/t Average output pow <td>) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-3 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-6 S EN/EN61000-4-11 re) ; 563.4K hrs min. MIL- Screw termina 0.94CUFT Screw termina rated load and 25°C of an er should not exceed the rated pair-wire terminated without and the solution of the</td> <td>Test Level Class B Class A Test Level Level 3, 10' Table 9, 9-2' Level 3, 10' Table 9, 9-2' Level 3, 10' Test Level Value 4, 151 Level 3, 10' Level 3, 11' Level 3, 10' Level 4, 30' >95% dip 0 >95% interr 'HDBK-217F (25°C) I style : 109*52*33.5mm (L I style : 0.206Kg;50pcs/11.: nbient temperature. ated power. th a 0.1 μ F & 47 μ F para</td> <td>/ Note / Note / Note // Note // Mote // Mote /</td>) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-3 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-6 S EN/EN61000-4-11 re) ; 563.4K hrs min. MIL- Screw termina 0.94CUFT Screw termina rated load and 25°C of an er should not exceed the rated pair-wire terminated without and the solution of the	Test Level Class B Class A Test Level Level 3, 10' Table 9, 9-2' Level 3, 10' Table 9, 9-2' Level 3, 10' Test Level Value 4, 151 Level 3, 10' Level 3, 11' Level 3, 10' Level 4, 30' >95% dip 0 >95% interr 'HDBK-217F (25°C) I style : 109*52*33.5mm (L I style : 0.206Kg;50pcs/11.: nbient temperature. ated power. th a 0.1 μ F & 47 μ F para	/ Note / Note / Note // Note // Mote // Mote /
EMC (Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC EMISS EMC IMMU MTBF DIMENSION PACKING 1. All para 2. 33% DU 3. Ripple & 4. Toleranu 5. Derating 6. Touch c 7. The am	ANDARDS ILEVEL D VOLTAGE IRESISTANCE SION NITY Meters NOT specia ty cycle maximum & noise are measur ce : includes set up g may be needed u urrent was measur bient temperature c	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility Conducted susceptibility Magnetic field immunity Voltage dip, interruption 4590.4K hrs min. Telc PCB mounting style : 0.1 Ily mentioned are measu within every 30 seconds. ed at 20MHz of bandwidt tolerance, line regulation nder low input voltages. F ed from primary input to I lerating of 3.5°C/1000m v	N60335-1(by request) IOPP 0VDC / 25°C / 70% RI S B B B B B B B B B B JEN60601-1-2 S B JEN606001-1-2 B B B B B B B B B B B SK3(500cs/12.1Kg/C Fed at 230VAC input, Average output pow h by using a 12" twis and loa) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-6 S EN/EN61000-4-7 S EN/EN61000-4-8 S EN/EN61000-4-11 re) ; 563.4K hrs min. MIL- Screw termina 0.94CUFT Screw termina rated load and 25°C of an er should not exceed the ra- sted pair-wire terminated wi atting curve for more details und of 5°C/1000m with fan a	Test Level Class B Class A Test Level Level 3, 10° Table 9, 9~2° Level 3, 10° Level 4, 30. >95% dip 0 Level 4, 30. 1 style : 109*52*33.5mm (Level 4.7 µ F para <t< td=""><td>/ Note / Note / Note KV air ; Level 4, 8KV contact V/m (80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line V A/m .5 periods, 30% dip 25 period uptions 250 periods *W*H) 3Kg/0.56CUFT allel capacitor. de higher than 2000m(6500</td></t<>	/ Note / Note / Note KV air ; Level 4, 8KV contact V/m (80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line V A/m .5 periods, 30% dip 25 period uptions 250 periods *W*H) 3Kg/0.56CUFT allel capacitor. de higher than 2000m(6500
EMC (Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC EMISS EMC IMMU MTBF DIMENSION PACKING 1. All para 2. 33% Du 3. Ripple & 4. Tolerating 5. Derating 6. Touch c 7. The am 8. The pow	ANDARDS ILEVEL D VOLTAGE IRESISTANCE SION NITY Meters NOT specia ty cycle maximum & noise are measur cc : includes set up g may be needed u gurrent was measur bient temperature c wer supply is consic	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility Conducted susceptibility Magnetic field immunity Voltage dip, interruption 4590.4K hrs min. Telc PCB mounting style : 0.1 Ily mentioned are measu within every 30 seconds. ed at 20MHz of bandwidt tolerance, line regulation nder low input voltages. F ed from primary input to I lerating of 3.5°C/1000m v lered a component which	N60335-1(by request) IOPP 0VDC / 25°C / 70% RI S B B B B B B B B B B P S B P B P B P B P B P B P B P B P B P B P B P B P B P B P B P B P B P B P B) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-6 S EN/EN61000-4-7 S EN/EN61000-4-8 S EN/EN61000-4-8 S EN/EN61000-4-11 re) ; 563.4K hrs min. MIL- Screw termina 0.94CUFT Screw termina rated load and 25°C of an er should not exceed the ra sted pair-wire terminated wi ating curve for more details und of 5°C/1000m with fan ra a final equipment. The fina	Test Level Class B Class A Test Level Level 3, 10° Table 9, 9~2° Level 3, 10° You 10° You 10° Level 3, 10° Level 3, 10° Level 3, 10° You 10° Level 3, 10° Table 9, 9~2° Istyle : 109*52*33.5mm (Level 4, 30° Level 4, 30°	/ Note / Note / Note (V air ; Level 4, 8KV contact V/m (80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line V //Line-Line V A/m .5 periods, 30% dip 25 perio uptions 250 periods */W*H) 3Kg/0.56CUFT allel capacitor. de higher than 2000m(650 onfirmed that it still
EMC (Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC EMISS EMC IMMU MTBF DIMENSION PACKING 1. All paral 2. 33% Du 3. Ripple & 4. Toleranu 5. Derating 6. Touch co 7. The am 8. The pov meets E	ANDARDS ILEVEL D VOLTAGE IRESISTANCE SION NITY Meters NOT specia ty cycle maximum a noise are measur ce : includes set up g may be needed u surrent was measur bient temperature c ver supply is consic EMC directives. For	Design refer to BS EN/E Primary-Secondary: 2xW I/P-O/P:4KVAC I/P-O/P:100M Ohms / 50 Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55035, BS EN Parameter ESD RF field susceptibility EFT bursts Surge susceptibility Conducted susceptibility Conducted susceptibility Magnetic field immunity Voltage dip, interruption 4590.4K hrs min. Telc PCB mounting style : 0.1 Ily mentioned are measu within every 30 seconds. ed at 20MHz of bandwidt tolerance, line regulation nder low input voltages. F ed from primary input to I lerating of 3.5°C/1000m v lered a component which	N60335-1(by request) IOPP 0VDC / 25°C / 70% RI S B Contast R-332 (Bellcontrestrestrestrestrestrestrestrestrestres) H tandard S EN/EN55011 (CISPR11) S EN/EN55011 (CISPR11) S EN/EN61000-3-2 S EN/EN61000-3-3 tandard S EN/EN61000-4-2 S EN/EN61000-4-3 S EN/EN61000-4-3 S EN/EN61000-4-4 S EN/EN61000-4-5 S EN/EN61000-4-6 S EN/EN61000-4-6 S EN/EN61000-4-7 S EN/EN61000-4-8 S EN/EN61000-4-11 re) ; 563.4K hrs min. MIL- Screw termina 0.94CUFT Screw termina rated load and 25°C of an er should not exceed the ra- sted pair-wire terminated wi ating curve for more details and of 5°C/1000m with fan in a final equipment. The fina s, please refer to "EMI testin	Test Level Class B Class A Test Level Level 3, 10° Table 9, 9~2° Level 3, 10° You 10° You 10° Level 3, 10° Level 3, 10° Level 3, 10° You 10° Level 3, 10° Table 9, 9~2° Istyle : 109*52*33.5mm (Level 4, 30° Level 4, 30°	/ Note / Note / Note (V air ; Level 4, 8KV contact V/m (80MHz~2.7GHz) 28V/m(385MHz~5.78GHz) V V/Line-Line V //Line-Line V A/m .5 periods, 30% dip 25 perio uptions 250 periods */W*H) 3Kg/0.56CUFT allel capacitor. de higher than 2000m(650 onfirmed that it still







