



## PBA300F EMI/EMS Test result

 September 16, 2004  
 Design engineering dep.

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No.	Test item	Conditions	Conditions of Acceptability	Result
1	Line conduction	(1) Rated input(AC100V,120V,230V) (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$	(1)Meets the undermentioned standard. FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B	OK
2	Radiated emission	(1) Rated input(AC100V,120V,230V) (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$	(1)Meets the undermentioned standard. FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B	OK
3	Harmonic current (EN61000-3-2)	(1) Rated input (AC100V,230V) (2) Load 0 - Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$	(1)Meets the undermentioned standard. EN61000-3-2 classA	OK
4	Static electricity immunity test (EN61000-4-2)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Contact discharge voltage 8[kV] (Level 4)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
5	Radiated, radio-frequency, electromagnetic field immunity test (EN61000-4-3)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4)Testing field strength 10[V/m] (Level 3)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
6	Electrical fast transient/ burst immunity test (EN61000-4-4)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Test peak voltage 4[kV] (Level 4)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
7	Surge immunity test (EN61000-4-5)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Test voltage Line to line 2[kV] (Level 3) Line to earth 4[kV] (Level 4)	(1)The power supply is not stop (2)Circuit does not malfunction. (3)No abnormality of the insulation destruction etc. (4)Parts are no damaged.	OK
8	Immunity to conducted disturbances, induced by radio-frequency fields (EN61000-4-6)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Voltage level (e.m.f.) 10[V] (Level 3)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
9	Power frequency magnetic field immunity test (EN61000-4-8)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Magnetic field 30A/m (Level 4)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
10	Voltage dips, short interruptions and voltage variations immunity test (EN61000-4-11)	(1) Rated input (AC230V) -30% reduction at 10mS min. -60% reduction at 100mS min -95% reduction at 5S min. - $\pm 10\%$ variation at 15 minutes (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK

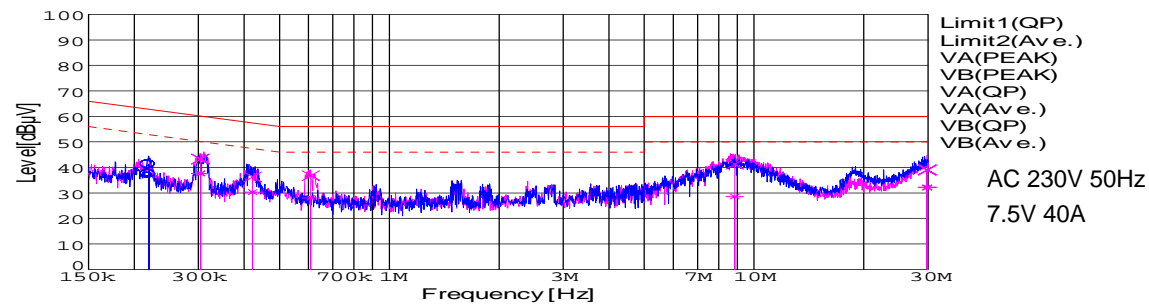
## DATA SHEET

Model		PBA300F-7R5	Date	21-Jan-04
Test		EMI Line conduction & Radiated emission	Temp.	25 degreeC
			Humid.	45 %RH
			Tested by	H.GOTO

### LINE CONDUCTION

Model Name : PBA300F-7R5  
 Model No. :  
 Serial No. :  
 Points : 6  
 Detector : PEAK/QP/Ave.  
 Line Mode : VA/VB  
 Power Supply : AC 230V 50Hz  
 Limit1: [EN 55022] Class B(QP)  
 Limit2: [EN 55022] Class B(Ave.)

Temp. : 25  
 Humi. : 45  
 Date : 2004/1/16 11:58  
 Test Equip. : R3132,ESPC  
 Load Line : 150mm  
 Comment : H.GOTO

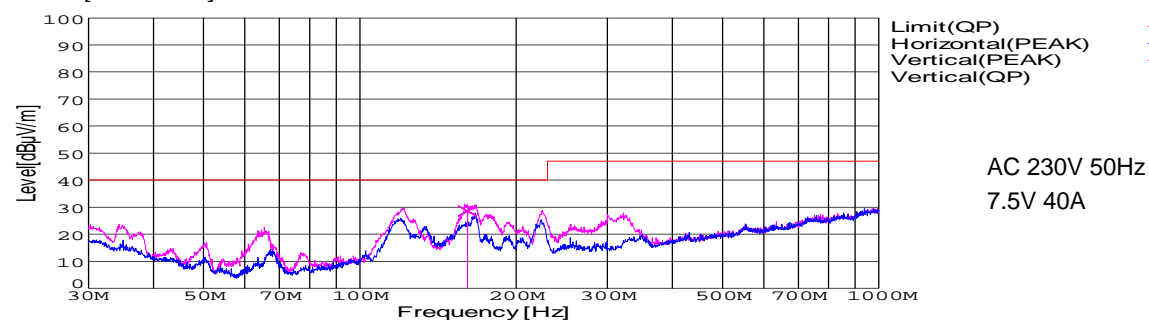


Frequency [MHz]	Meter Reading (Ave.) [dBuV]	Meter Reading (QP) [dBuV]	Factor [dB]	Level(Ave.) [dBuV]	Level(QP) [dBuV]	Line	Limit(Ave.) [dBuV]	Limit(QP) [dBuV]	Margin(Ave.) [dB]	Margin(QP) [dB]
0.2189	27.5	31.3	9.8	37.3	41.1	VA	52.9	62.9	15.6	21.8
0.3037	27.8	33.5	9.8	37.6	43.3	VB	50.2	60.2	12.6	16.9
0.422	20.4	26.4	9.9	30.3	36.3	VB	47.4	57.4	17.1	21.1
0.609	18.2	26.9	9.9	28.1	36.8	VB	46	56	17.9	19.2
8.8431	18.5	31.2	10.1	28.6	41.3	VB	50	60	21.4	18.7
29.7939	21.7	28.5	10.5	32.2	39	VB	50	60	17.8	21

### RADIATED EMISSION

Model Name : PBA300F-7R5  
 Model No. :  
 Serial No. :  
 Points : 1  
 Detector : PEAK/QP  
 Polarization : Vertical  
 Power Supply : AC 230V 50Hz  
 Limit: [EN 55022] Class B<3m>

Temp. : 25  
 Humi. : 40  
 Date : 2004/1/21 5:45  
 Test Equip. : R3132,ESPC  
 Load Line : 150mm  
 Comment : H.GOTO



Frequency [MHz]	Meter Reading (QP) [dBuV]	Ant. Type	Antenna Factor [dB/m]	Cable & Preamp [dB]	Level(QP) [dBuV/m]	Angle [°]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]
161.127	50.3	BL	9.8	-31.5	28.6	21	159	Vert.	40	11.4