PCN: V11-012-32002150-0A

Product Change Notice

Issue Date: 29 Sep 2011

Change Type:

Datasheet Specification Changes

Parts Affected:

ACPL-330J-000E	ACPL-331J-500NE	ACPL-333J-000E
ACPL-330J-500E	ACPL-332J-000E	ACPL-333J-500E
ACPL-331J-000E	ACPL-332J-000NE	QCPL-324J-500E
ACPL-331J-000NE	ACPL-332J-500E	QCPL-324J-500NE
ACPL-331J-500E	ACPL-332J-500NE	QCPL-327J-500E

All associated options and specials will also be affected.

Description and Extent of Change:

1. Add new test conditions to achieve Output High Level Common Mode Transient Immunity $ICM_H|$ and Output Low Level Common Mode Transient Immunity $|CM_L|$ of 50kV/µs(min) at V_{CM} = 1500V. Update $t_{DESAT(FAULT)}$ timing due to the new test conditions.

Current Specifications

Parameter	Symbol	Min.	Typ.	Max.	Units	Test Conditions	Note
DESAT Sense to Low Level FAULT Signal Delay	$t_{DESAT(FAULT)}$		0.25	0.5	µs	C_{DESAT} = 100 pF, R_F = 2.1 kΩ, Rg = 10 Ω, Cg = 10 nF,V_{CC2} = 30 V	18
Output High Level Common Mode Transient Immunity	$ICM_H\|$	15	25		kV/µs	T_A = 25°C, V_{CM} = 1500 V, I_F = 10 mA, V_{CC2} = 30 V	21
Output Low Level Common Mode Transient Immunity	$\|CM_L\|$	15	25		kV/µs	T_A = 25°C, V_{CM} = 1500 V, V_F = 0 V, V_{CC2} = 30 V	22

New Specification

Parameter	Symbol	Min.	Typ.	Max.	Units	Test Conditions	Note
DESAT Sense to Low Level FAULT Signal Delay	$t_{DESAT(FAULT)}$		0.25	0.5	µs	C_{DESAT} = 100 pF, R_F = 2.1 kΩ, Rg = 10 Ω, , **C_F = Open** Cg = 10 nF,V_{CC2} = 30 V	18
			0.8			C_{DESAT} = 100 pF, R_F = 2.1 kΩ, **C_F = 1 nF**, Rg = 10 Ω, Cg = 10 nF,V_{CC2} = 30 V	

Output High Level Common Mode Transient Immunity	$\|CM_H\|$	15	25		kV/µs	T_A = 25°C, V_{CM} = 1500 V, I_F = 10 mA, V_{CC2} = 30 V, **R_F = 2.1 kΩ, C_F = 15 pF**	21
		50	60			T_A = 25°C, V_{CM} = 1500 V, I_F = 10 mA, V_{CC2} = 30 V, **R_F = 2.1 kΩ, C_F = 1 nF**	21, **26**
Output Low Level Common Mode Transient Immunity	$\|CM_L\|$	15	25		kV/µs	T_A = 25°C, V_{CM} = 1500 V, V_F = 0 V, V_{CC2} = 30 V, **R_F = 2.1 kΩ, C_F = 15 pF**	22
		50	60			T_A = 25°C, V_{CM} = 1500 V, V_F = 0 V, V_{CC2} = 30 V, **R_F = 2.1 kΩ, C_F = 1 nF**	

Notes:
26. Split resistors network is needed at input LED1.

2. Change Positive Input Supply Voltage, V_{CC1} absolute maximum ratings from 5.5V to 7V.

Current Specification

Parameter	Symbol	Min.	Max.	Units
Positive Input Supply Voltage	V_{CC1}	-0.5	5.5	V

New Specification

Parameter	Symbol	Min.	Max.	Units
Positive Input Supply Voltage	V_{CC1}	-0.5	**7**	V

Reasons for Change:

1. Better laboratory testing equipment and different test conditions enable manufacturing to guarantee a higher common mode rejection (CMR) transient immunity value.

2. To align V_{CC1} to standard CMOS logic gate absolute maximum ratings of 7 V.

Effect of Change on Fit, Form, Function, Quality, or Reliability:

All other remaining electrical specifications in datasheet and physical characteristics have not been changed. No changes have been made to the product design and manufacturing process. Appropriate electrical characterization has been performed on representative products to ensure normal parametric distribution, consistent electrical performance.

Effective Date of Change:

Datasheet changes take effect from 29 September 2011. Datasheet released on Avago's website from 29 September 2011.

Qualification Data:

Data has been generated and approved.

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies procedure: Change Control and Customer Notification, A-5962-6052-80.

Please contact your Avago Technologies field sales engineer or Contact Center (http://www.avagotech.com/contact/) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.