

PCN: V08-004-32002150-0A

# **Product Change Notice**

Issue Date: 1 September 2008

# **Change Type:**

Major Change: Package related as below

- 1) Molding compound material change for 250V series solid state relay
- 2) Leadframe material change for DIP8 series solid state relay

There is no change to electrical specification in the datasheet.

# **Parts Affected:**

1) 250V Series Solid State Relay (mold compound change)

ASSR-3211-001E	ASSR-3211-301E	ASSR-3211-501E
ASSR-3220-002E	ASSR-3220-302E	ASSR-3220-502E
ASSR-322R-002E	ASSR-322R-302E	ASSR-322R-502E
ASSR-3210-003E	ASSR-3210-303E	ASSR-3210-503E
ASSR-321R-003E	ASSR-321R-303E	ASSR-321R-503E

2) DIP8 Series Solid State Relay (leadframe change)

60V Series	250V Series	400V Series	V62X Series
ASSR-1228-002E	ASSR-3220-002E	ASSR-4120-002E	ASSR-V621-002E
ASSR-1228-302E	ASSR-3220-302E	ASSR-4120-302E	ASSR-V621-302E
ASSR-1228-502E	ASSR-3220-502E	ASSR-4120-502E	ASSR-V621-502E
ASSR-1420-002E	ASSR-322R-002E	ASSR-4128-002E	ASSR-V622-002E
ASSR-1420-302E	ASSR-322R-302E	ASSR-4128-302E	ASSR-V622-302E
ASSR-1420-502E	ASSR-322R-502E	ASSR-4128-502E	ASSR-V622-502E
ASSR-1520-002E			
ASSR-1520-302E			
ASSR-1520-502E			

#### **Description and Extent of Change:**

- 1) Change the molding compound type from white to black molding compound material
- 2) Change the leadframe material from Alloy 42 to Cu based

# **Reasons for Change:**

- 1) Black molding compound has very low optical transmissivity such that this series of 250V device is insensitive to the very bright ambient light. This will give a more robust product across wide application conditions.
- 2) Cu based leadframe using Copper alloy 194 gives a better thermal performance and lower Vos reading than Al42 leadframes.

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

1) There may be slight changes in typical performance but the minimum/maximum limits specified in product data sheet remain unchanged. The only observation change is the typical value of Turn-on Time for ASSR-32xx as listed below.

The change was verified with limited samples build to be working, and meeting all current specifications. Appropriate electrical characterization and reliability qualification will be performed on representative products to insure consistent electrical performance and reliability.

Device	Parameter	Sym.	Min.	Тур.	Max.	Units	Conditions
32XX (New) Turn On Time	Ton		0.29	1.0	ms	I <sub>F</sub> =5mA, I <sub>O</sub> =200mA, T <sub>A</sub> =25°C	
				2.0		I <sub>F</sub> =5mA, I <sub>O</sub> =200mA	
32XX (Old) Turn On Time	Ton		0.25	1.0	ms	I <sub>F</sub> =5mA, I <sub>O</sub> =200mA, T <sub>A</sub> =25°C	
				2.0		I <sub>F</sub> =5mA, I <sub>O</sub> =200mA	

 Better thermal performance and lower Vos values are observed when the leadframe is changed from Al42 to Cu-based.

#### **Effective Date of Change:**

Product shipments using this change will begin on or from date code 0852. Timing of shipment of the changed part will vary by part number depending on customer demand and inventory levels.

#### **Qualification Data:**

Qualification and Characterization data of the new build standard will be available upon request. Customer samples will be available in Dec 2008.

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies' procedure: Change Control and Customer Notification, .

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