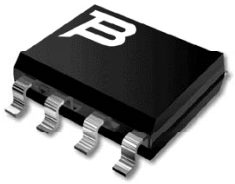
BOURNS®

Product Change Notification

THYRISTOR SURGE PROTECTORS

Bourns Manufacturers Representatives
Corporate Distributor Product Managers
Americas Sales Team
Asia Sales Team
Europe Sales Team



April, 2009

PCN Tracking Number 48
Change from Gold to Copper Wire

In 2Q08, Bourns qualified a change to the base metal composition of the wires used to bond over-voltage protection chips to the package terminals of the 8-pin SOP (150 mil) package.

This notification extends that qualification to similar parts assembled in 8-pin SOP (210 mil EIAJ) packages assembled at AIC Semiconductor SDN BHD, Kedah Darul Aman, Malaysia.

Products Affected by the Change:
Bourns® TISP® Overvoltage Protection Products assembled using the 8-pin SOP (210 mil EIAJ) package. A list of products is provided on page 3 of this document.

Reason for the Change:
Copper wire is now a technically viable alternative to gold wire after several years' development of the wirebond process by mainstream bonder suppliers. Copper wire was introduced on 8-pin SOP (150 mil) products shipped since September 2008. This change extends the range of products using copper wire.

Product Labeling:
Product marking is unchanged.

Identification of the Changed Product:
Bourns maintains traceability back to the source wafer lots and assembly sites for all products.

Implementation Date:
Assembly of product will begin July 2009. Deliveries to customers may occur from August 2009 onwards.

First Date Code with Copper Wire:
0827

Impact on Form, Fit, Function and Reliability:
The package outline dimensions will continue to meet Bourns' current data sheet. Data sheet product ratings and electrical characteristics are unaffected by the change. There is no impact on form, fit, function or reliability.

Qualification Plan/Results:
See following page.

Last Date of Manufacture of Existing Product:
Product phase to copper wire may extend over a period of 3-6 months from July 2009.

Point of Contact:
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Qualification Information as Follows:

All Products	
Die Technology	Thyristor Overvoltage Protector
Product Name	Per Table (Row 1)
Die Name	Per Table (Row 2)
Top Metal	Al
Back Metal	AlNiAu
Assembly Site	AIC, Malaysia
Pins/Package	8/210 mil SOIC
Mold Compound	Sumitomo G600 Type
Die Attach	Ablebond 84-1 LMISR4
Bond Wire	Multiple 2 Mil Copper
L/F Material	Copper
Marking	Laser
Termination Finish	Matte Sn (Pb Free)

Qualification Plan:

					Test Plan		
Stress Test	**Conditions**	**Standard**	**Method**	**SS/Acc**	Lot 1 61089H Single Die	Lot 2 8201M Single Die	Lot 3 9110LDM Dual die
HTRB	150 °C,1000 h	MIL STD 750	1048	129/1	45/-	45/-	45/-
THB	85 °C/85 %RH, 1000 h	JESD22	A101	129/1	45/-	45/-	45/-
T Cycle	65/+150 °C, 200 cs	MIL STD 883	2031	129/1	45/-	45/-	45/-
Ball Shear Strength	>100 g	JESD22	B116	25/0	25/0	25/0	25/0
Wire Pull Strength	>12 g	MIL STD 883	2011	76/0	76/0	76/0	76/0
Die Shear	>5 Kg	MIL STD 883	2019	5/0	5/0	5/0	5/0
Moisture Sensitivity	MSL1	J-STD-020	No Change to Leadframe or Mold Compound				

Samples subjected to HTRB, THB and T Cycle are preconditioned according to JESD22-A113 (260C).

Stress Test Completion Date:
June 2009

8-Pin SOP (210 mil) Part Numbers:
TISP61089HDMR-S
TISP8200MDR-S
TISP8201MDR-S
TISP9110LDMR-S