# BOURNS

# **Product Change Notification**

# CHIP DIODES

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



Revised November 24, 2011

# Additional Assembly/Test Location for TVS Diode DFN Packages

To support increasing demand, secure continuity of supply and provide maximum flexibility to our customers, Bourns is adding an additional Assembly/Test Location in China for the assembly/test of DFN packages for our TVS Diode products.

The affected Bourns<sup>®</sup> part number using the DFN package is CDDFN6-0504P.

### **Qualification:**

Below are the *Qualification Information & Results* using the DFN 1.6 x 1.6 - 6L package at the new assembly/test location.

#### **Qualification Information:**

All Products				
Die Technology	TVS Diode Products			
Product Name	CDDFN6-0504P			
Top Metal	AI			
Back Metal	AlNiAu			
Assembly Site	China			
Pins/Package	DFN 1.6 x 1.6 -6L			
Mold Compound	Sumitomo G770HCD			
Die Attach	Sumitomo 84-3J			
Bond Wire	Multiple 1 Mil Au			
L/F Material	Copper			
Marking	Laser			
Termination Finish	Matte Sn (Pb Free)			

#### **Qualification Results:**

Test Plan						
					Lot 1	
					CDDFN6-0504P	
Stress Test	Conditions	Standard	Method	SS/Acc	SS/fail	
Moisture Induced Stress Sensitivity		J-STD-020	-	Level3	66/0	
HTRB	125°C,1000 h	MIL STD 750	1048	76/0	76/0	
HTSL	150 °C, 1000 h	J-STD-22	A103	22/0	22/0	
РСТ	85 ℃ / 85 % RH, 1000 h	J-STD-22	A102	22/0	22/0	
T Cycle	65 / +150 °C, 1000 cs	J-STD-22	A104	22/0	22/0	
Solderability	8 h Steam	JESD22-	B102E	5/0	5/0	
Lead Fatigue	-	MIL STD 883	2004	22/0	8/0	
Lead Pull	-	MIL STD 883	2004	22/0	8/0	
Lead Adhesion	-	MIL STD 883	2025	15/0	8/0	
Dimensions	Data Sheet	MIL STD 883	2025	5/0	5	
Flammability	3 mm	UL94-V0				
W/Bond Pull Strength	-	MIL STD 883	2011	76/0	76/0	
Die Shear	-	MIL STD 883	2019	5/0	5/0	
X-Ray	-	MIL STD 883	2012	5/0	5/0	

Samples subjected are preconditioned according to JESD22-A113 (260 °C).

# **Product Labeling:**

Product marking is unchanged except for country code information. Labels will show the country of origin code.

# **Identification of the Changed Product:**

Bourns maintains traceability back to source wafer lots and assembly sites for all products.

# First Date Code from New Site: 1203

# Impact on Form, Fit, Function and Reliability:

The package outline dimensions will continue to meet the current Bourns data sheet. Materials specified for packaging are unchanged. Product ratings and electrical characteristics are unaffected by the change. There is no impact on form, fit, function or reliability.

# Last Date of Manufacture of Existing Product:

Bourns has no plans to discontinue assembly & test of products at its existing subcontract sites.

# **Implementation Date:**

Assembly of product will begin January 2012. Deliveries to customers may occur from May 2012 onwards.

If you have any questions, please contact our customer service teams in your region.