

Date Created : 2007/05/03
Date Issued On : 2007/05/08
PCN# : Q1070601-A

DESIGN/PROCESS CHANGE NOTIFICATION -- FINAL

This is to inform you that a design and/or process change will be made to the following product(s). This notification is for your information and concurrence.

If you require data or samples to qualify this change, please contact **Fairchild Semiconductor within 30 days of receipt of this notification.**

Updated process quality documentation, such as FMEAs and Control Plans, are available for viewing upon request.

If you have any questions concerning this change, please contact:

Technical Contact:

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PCN Originator:

Name: Constantino, John
E-mail: John.Constantino@fairchildsemi.com
Phone: 408-822-2652

Implementation of change:

Expected 1st Device Shipment Date: 2007/06/05

Earliest Year/Work Week of Changed Product: 0723

Change Type Description: Assembly Process

Description of Change (From): 8-pin DIP coplanar construction (225C max reflow solder rating)

Description of Change (To): 8-pin DIP over-under construction (260C max reflow solder rating).

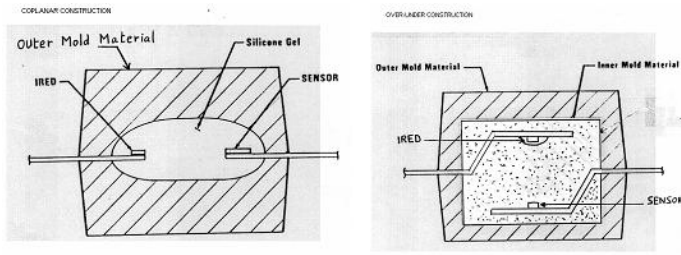
Reason for Change : Enhanced thermal performance. The new construction allows for a 260C peak reflow temperature compatible with Pb free assembly processing. Data sheet specifications will remain unchanged. Samples of the new construction are available upon request to validate typical electrical performance in end applications.

Qual/REL Plan Numbers : Q20060246

Qualification :

Passed successfully

Change From



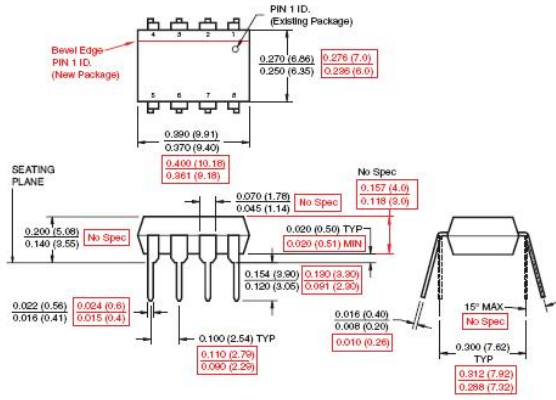
Change To

Package Dimension Comparison

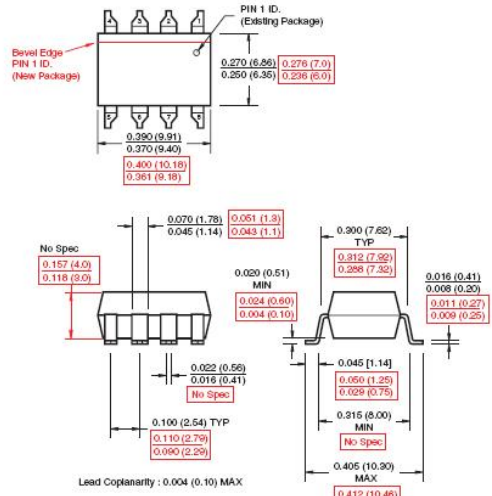
X.XXX (X.XX)
Y.YYY (Y.YY)
Existing Package

X.XXX (X.XX)
Y.YYY (Y.YY)
New Package

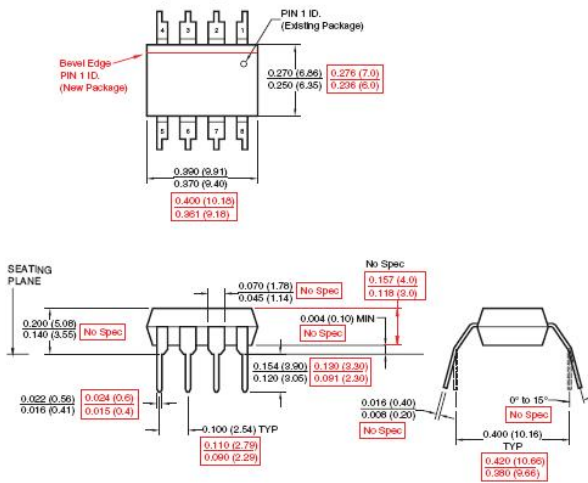
Through Hole



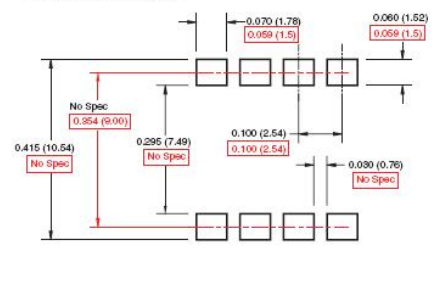
Surface Mount



0.4" Lead Spacing



Recommend Pad Layout for Surface Mount Leadform



Notes:

All dimensions are in inches (millimeters)

Results/Discussion

Test: (Autoclave)					
Lot	Device	96-HOURS	Failure Code		
Q20060246AAACLVA	MCT6	0/45			
Q20060246ABACLVA	MCT6	0/45			
Q20060246BAACLVA	MCT9001	0/45			
Q20060246BBACLVA	MCT9001	0/45			
Test: (High Temperature Op Life)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20060246AAHTOLA	MCT6	0/45			
			0/45		
				0/45	
Q20060246ABHTOLA		0/45			
			0/45		
				0/45	

Q20060246BAHTOLA	MCT9001	0/45			
			0/45		
				0/45	
Q20060246BBHTOLA		0/45			
			0/45		
				0/45	

Test: (High Temperature Reverse Bias)

Lot	Device	96-HOURS	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20060246AAHTRBA	MCT6	0/45				
			0/45			
				0/45		
					0/45	
Q20060246ABHTRBA		0/45				
			0/45			
				0/45		
					0/45	
Q20060246BAHTRBA	MCT9001	0/45				
			0/45			
				0/45		
					0/45	
Q20060246BBHTRBA		0/45				
			0/45			
				0/45		
					0/45	

Test: (High Temperature Storage Life)

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20060246AAHTSLA	MCT6	0/45			
			0/45		
				0/45	
Q20060246ABHTSLA		0/45			
			0/45		
				0/45	
Q20060246BAHTSLA	MCT9001	0/45			
			0/45		
				0/45	
Q20060246BBHTSLA		0/45			
			0/45		
				0/45	

Test: (Low Temperature Storage)

Lot	Device	168-HOURS	500-HOURS	1000	Failure Code
Q20060246AALTSA	MCT6	0/45			
			0/45		
				0/45	
Q20060246ABLTSA		0/45			
			0/45		
				0/45	
Q20060246BALTSA	MCT9001	0/45			
			0/45		
				0/45	
Q20060246BBLTSA		0/45			
			0/45		
				0/45	

Test: (Power Cycle)

Lot	Device	5000-CYCLES	10000-CYCLES	15000-CYCLES	Failure Code
Q20060246AAPRCLA	MCT6	0/45			
			0/45		
				0/45	
Q20060246ABPRCLA		0/45			
			0/45		
				0/45	
Q20060246BAPRCLA	MCT9001	0/45			
			0/45		
				0/45	
Q20060246BBPRCLA		0/45			
			0/45		
				0/45	

Test: -40C, 125C (Temperature Cycle)				
Lot	Device	100-CYCLES	200-CYCLES	Failure Code
Q20060246AATMCL2A	MCT6	0/45		
Q20060246AATMCL2A	MCT6		0/45	
Q20060246ABTMCL2A	MCT6	0/45		
Q20060246ABTMCL2A	MCT6		0/45	
Q20060246BATMCL2A	MCT9001	0/45		
Q20060246BATMCL2A	MCT9001		0/45	
Q20060246BBTMCL2A	MCT9001	0/45		
Q20060246BBTMCL2A	MCT9001		0/45	

Test: MSL(1), PKG(Small), PeakTemp(260c), Cycles(3) (Precondition)				
Lot	Device	Results	Failure Code	
Q20060246AAPCNL1AA	MCT6	0/270		
Q20060246ABPCNL1AA	MCT6	0/270		
Q20060246BAPCNL1AA	MCT9001	0/270		
Q20060246BBPCNL1AA	MCT9001	0/270		

Product Id Description :

Affected FSIDs :

H11AD6X_5053	H11AD6X_5151	H11AD6X_5195
H11AD6X_5212	H11AD6X_5269DL	H11AD6X_5402D
H11AD6X_5404	H11AD6X_5405	H11AD6X_5405D
H11AD6X_5405S	H11AD6X_5438D	H11AD6X_5659
H11AD6X_5669D	H11AD6X_5678D	H11AD6X_5686D
H11AD6X_N5402D	H11AD6X_N5404	H11AD6X_N5405D
H11AD6X_N5438D	H11AD9X_5144	H11AD9X_5660
H11AD9X_N5660	MCT6	MCT61
MCT61S	MCT61SD	MCT61W
MCT61_NL	MCT62	MCT62S
MCT62SD	MCT62SD_F094	MCT62SD_NL
MCT62S_NL	MCT62W	MCT62_F094
MCT62_NL	MCT6S	MCT6SD
MCT6SD_NL	MCT6W	MCT6W_NL
MCT6_F094	MCT6_NL	MCT9001
MCT9001S	MCT9001SD	MCT9001SD_NL
MCT9001W	MCT9001_NL	