

Date Created : **2007/11/16**  
Date Issued On : **2007/11/29**  
PCN# : **Q3073802-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: Sun, Brian  
E-mail: Brian.Sun@fairchildsemi.com  
Phone:

Implementation of change:

Expected 1st Device Shipment Date: 2008/01/29

Earliest Year/Work Week of Changed Product: 0805

Change Type Description: Lead Frame Dimensions (Internal and External)

Description of Change (From): Current TO-220 heatsink and die attach pad thickness of 1.30mm.

Description of Change (To): New TO-220 heatsink and die attach pad thickness will be 0.51mm. There is no change in heatsink and die attach pad material. Conversion of heatsink thickness will be done on a part by part basis starting WW05 of 2008 to prevent mixing of product with different heat sink dimensions in shipments during the transition period.

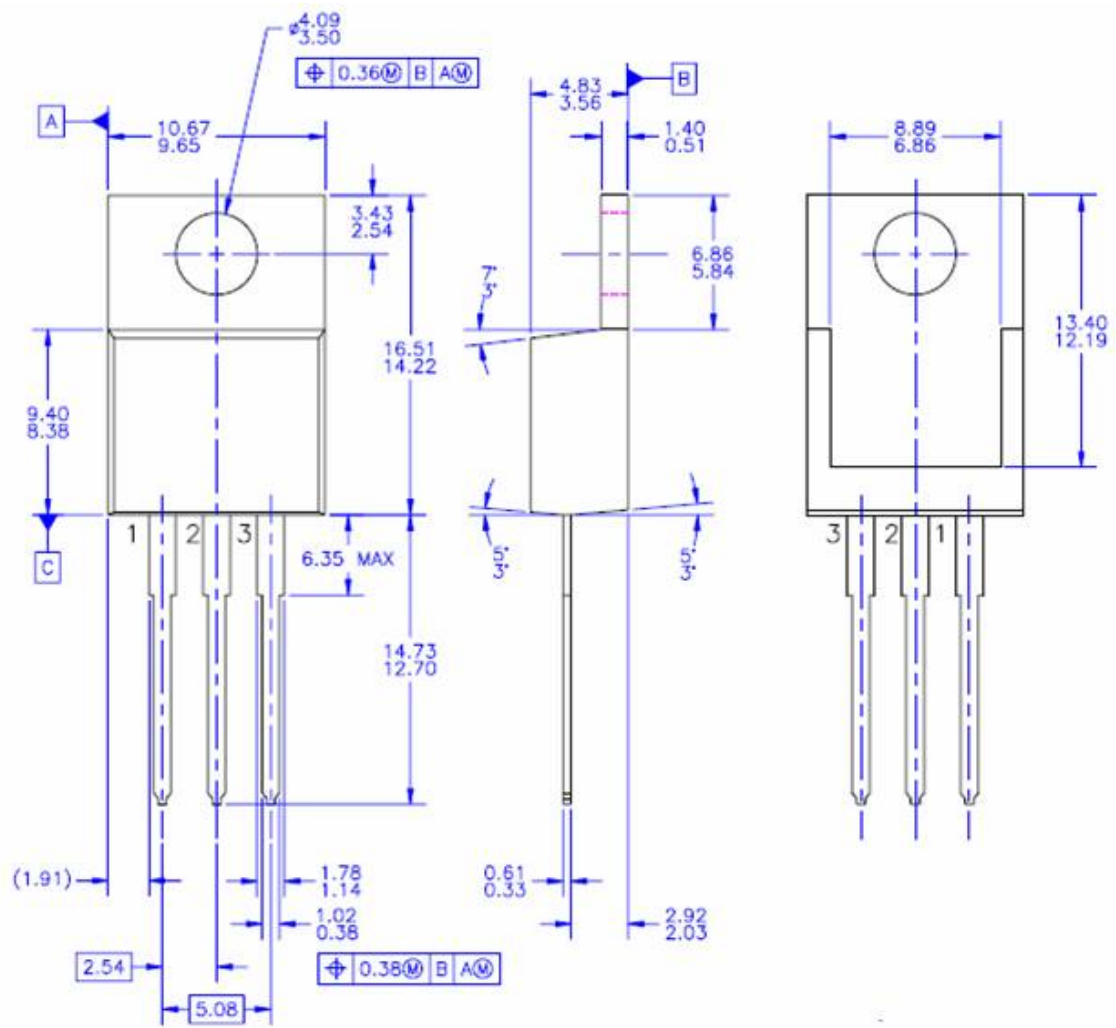
Reason for Change : Enhancement of leadframe design to improve package mechanical performance and support additional demand for various TO-220 products to improve our service to customers. There is insignificant difference in product thermal performance.

Qual/REL Plan Numbers : Q20070208

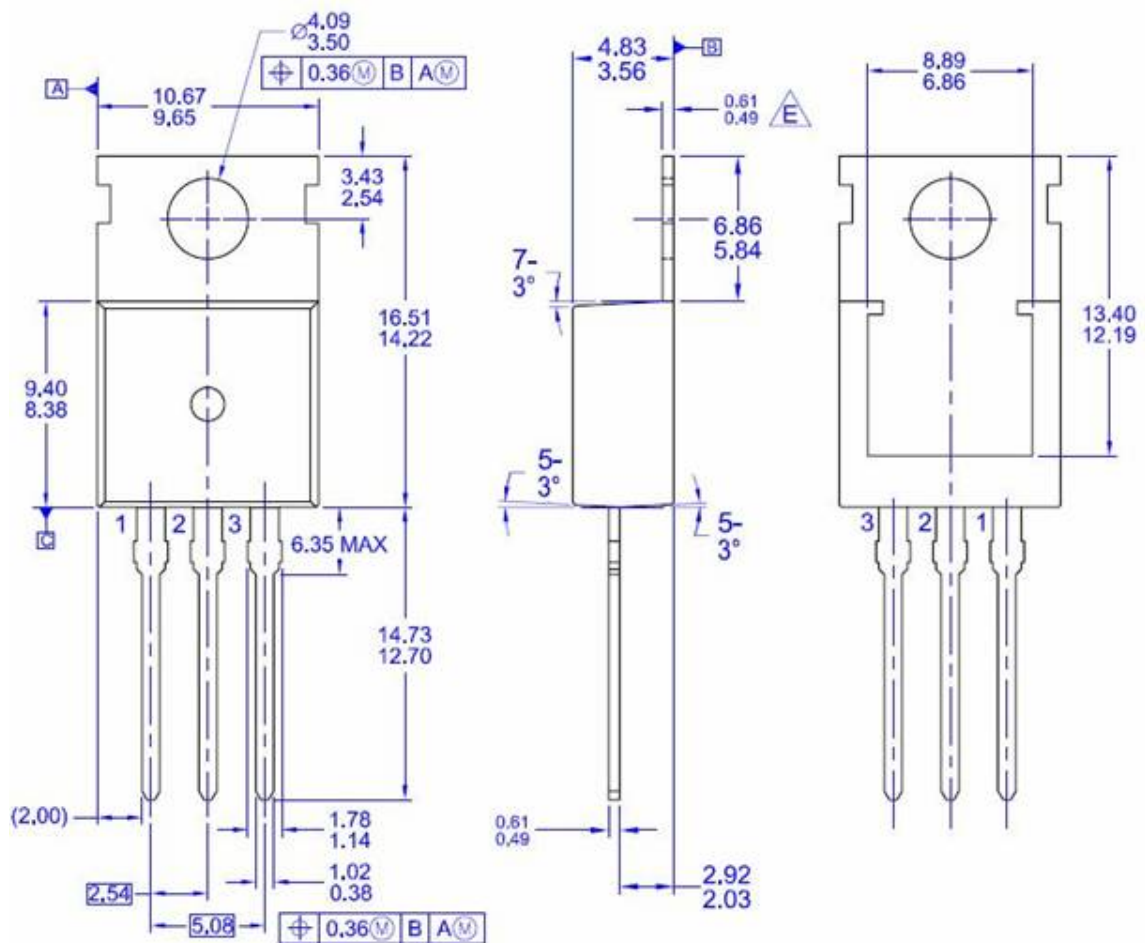
Qualification :

Passed and meet the FSC rel performance requirement

Change From



Change To



## Results/Discussion

Test: (Autoclave)					
Lot	Device	96-HOURS	Failure Code		
Q20070208AAACLV	MC78T12CT	0/77			
Q20070208BAACLV	KA350TU	0/77			
Q20070208CAACLV	KSE13003TH2ATU	0/77			
Q20070208DAACLV	KSE13009TU	0/77			
Q20070208EAACLV	FJP5027RTU_F080	0/77			
Test: (High Temperature Reverse Bias)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070208CAHTRB	KSE13003TH2ATU	0/77			
			0/77		
				0/77	
Q20070208DAHTRB	KSE13009TU	0/77			
			0/77		
				0/77	
Q20070208EAHTRB	FJP5027RTU_F080	0/77			
			0/77		
				0/77	
Test: (High Temperature Storage Life)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070208AAHTSL	MC78T12CT	0/77			
			0/77		
				0/77	
Q20070208BAHTSL	KA350TU	0/77			
			0/77		
				0/77	
Q20070208CAHTSL	KSE13003TH2ATU	0/77			

			0/77		
				0/77	
Test: (Temperature Humidity Biased Test)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070208AATHBT	MC78T12CT	0/77			
			0/77		
				0/77	
Q20070208BATHBT	KA350TU	0/77			
			0/77		
				0/77	
Q20070208CATHBT	KSE13003TH2ATU	0/77			
			0/77		
				0/77	
Q20070208DATHBT	KSE13009TU	0/77			
			0/77		
				0/77	
Q20070208EATHBT	FJP5027RTU_F080	0/77			
			0/77		
				0/77	
Test: -65C, 150C (Temperature Cycle)					
Lot	Device	100-CYCLES	500-CYCLES		Failure Code
Q20070208AATMCL1	MC78T12CT	0/77			
Q20070208AATMCL1	MC78T12CT		0/77		
Q20070208BATMCL1	KA350TU	0/77			
Q20070208BATMCL1	KA350TU		0/77		
Q20070208CATMCL1	KSE13003TH2ATU	0/77			
Q20070208CATMCL1	KSE13003TH2ATU		0/77		
Q20070208DATMCL1	KSE13009TU	0/77			
Q20070208DATMCL1	KSE13009TU		0/77		
Q20070208EATMCL1	FJP5027RTU_F080	0/77			
Q20070208EATMCL1	FJP5027RTU_F080		0/77		

Product Id Description :

Affected FSIDs :

BD239ATU	BD239BTU	BD239C
BD239CTU	BD239TU	BD240A
BD240B	BD240BTU	BD240CTU
BD240CTU_NL	BD240TU	BD241ATU
BD241BTU	BD241CTU	BD241TU
BD242ATU	BD242B	BD242C
BD242CTU	BD242TU	BD243A
BD243ATU	BD243B	BD243BTU
BD243C	BD243CTU	BD243TU
BD244A	BD244ATU	BD244B
BD244BTU	BD244C	BD244TU
BD533J	BD534J	BD534K
BD534KTU	BD535J	BD536J
BD537J	BD537K	BD537KTU
BD538J	BD538K	BD538KTU
BDW23ATU	BDW23BTU	BDW23CTU
BDW23TU	BDW24ATU	BDW24BTU
BDW24CTU	BDW24TU	BDW93
BDW93A	BDW93C	BDW93CTU
BDW93C_NL	BDW94	BDW94C
BDX33B	BDX33C	BDX33CTU
BDX34A	BDX34B	BDX34BTU

BDX34C	BDX53ATU	BDX53BTU
BDX53C	BDX53CTU	BDX53CTU_NBDC004
BDX53C_NL	BDX53TU	BDX54ATU
BDX54BTU	BDX54C	BDX54CTU
BDX54TU	BU406	BU406TU
BU407	BU407HTU	BU407TU
BU408	BU806	BU807
BU807TU	BUT11	BUT11A
BUT11ATU	BUT11TU	BUT12A
BUT12ATU	BUT12TU	D44H10TU
D44H11TU	FJP13007H1TU	FJP13007H1TU_F080
FJP13007H2TU	FJP13007H2TU_F080	FJP13007TU
FJP13009	FJP13009H2TU	FJP13009H2TU_F080
FJP13009TU	FJP3305	FJP3305H1TU
FJP3305H2TU	FJP3305TU	FJP5027OTU
FJP5027RTU	FJP5027RTU_F080	FJP5027TU
FJP5304DTU	FJP5304DTU_F080	FJP5321TU
FJP5355TU	FJP5554	FJP5554TU
FJP5555TU	FJP5555TU_NL	FJP9100TU
FYP1004DNTU	FYP1004DNTU_NL	FYP1010DNTU
FYP1010DNTU_NL	FYP1045DNTU	FYP1504DNTU
FYP1545DNTU	FYP2004DNTU	FYP2006DNTU
FYP2006DNTU_NL	FYP2010DNTU	FYP2010DNTU_F080
FYP2045DNTU	KSA1010OTU	KSA1010RTU
KSA1010Y	KSA1010YTU	KSA614O
KSA614OTU	KSA614R	KSA614RTU
KSA614Y	KSA614YTU	KSA940
KSA940H1TU	KSA940H2	KSA940H2TU
KSA940TU	KSB546O	KSB546Y
KSB546YTU	KSB596O	KSB596OTU
KSB596Y	KSB596YTU	KSB601OTU
KSB601Y	KSB601YTU	KSB601YTU_NL
KSB707OTU	KSB707RTU	KSB707YTU
KSB708OTU	KSB708RTU	KSB708YTU
KSB834O	KSB834Y	KSB834YTU
KSC1507O	KSC1507OTU	KSC1507R
KSC1507Y	KSC1507YTU	KSC2073
KSC2073H1TU	KSC2073H2	KSC2073H2TU
KSC2073TU	KSC2233	KSC2334OTU
KSC2334R	KSC2334RTU	KSC2334Y
KSC2334YTU	KSC2334YTU_NL	KSC2335OTU
KSC2335RTU	KSC2335YTU	KSC5027OTU
KSC5027RHTU_F080	KSC5039H2	KSC5305DTU
KSC5338D	KSC5338DTU	KSC5402DTTU
KSC5502DTTU	KSC5504DTTU_NL	KSC5603DTU
KSC5603DTU_NL	KSD288O	KSD288OTU
KSD288W	KSD288WTU	KSD288Y
KSD288YTU	KSD288YTU_NL	KSD362N

KSD362R	KSD362RTU	KSD363O
KSD363OTU	KSD363R	KSD363RTU
KSD363Y	KSD363YTU	KSD363YTU_F080
KSD401G	KSD401O	KSD401Y
KSD401YTU	KSD526O	KSD526OTU_F080
KSD526Y	KSD526YTU	KSD526YTU_F080
KSD560OTU	KSD560R	KSD560RTU
KSD560Y	KSD560YTU	KSD568OTU
KSD568RTU	KSD568YTU	KSD569OTU
KSD569RTU	KSD569YTU	KSD73O
KSD73Y	KSD73YTU	KSD880O
KSD880OPATU	KSD880Y	KSD880YTU
KSE13009TU	KSE2955T	KSE2955TTU
KSE3055T	KSE3055TTU	KSE44A11TU
KSE44H11	KSE44H11TU	KSE45H11
KSE45H11TU	KSE45H8	KSE45H8TU
MBR3030CTTU	MBRP1545NTU	MBRP2045NTU
MBRP3010NTU	MBRP3010NTU_NL	MBRP3045NTU
MBRP3045NTU_F080	MBRP3045NTU_NL	MJE2955TTU
MJE2955TTU_NL	MJE3055TTU	TIP100
TIP102	TIP102TU	TIP102_NL
TIP105	TIP105TU	TIP106
TIP107	TIP107TU	TIP110
TIP110TU	TIP111	TIP111TU
TIP112	TIP112TU	TIP115
TIP115TU	TIP117TU	TIP117TU_F080
TIP120	TIP120TU	TIP121
TIP121TU	TIP122	TIP122TU
TIP122TU_NL	TIP122_NL	TIP125
TIP125TU	TIP126	TIP126TU
TIP127	TIP127TU	TIP142T
TIP142TTU	TIP147T	TIP147TTU
TIP29	TIP29A	TIP29ATU
TIP29C	TIP29CTU	TIP30ATU
TIP30C	TIP30CTU	TIP31
TIP31A	TIP31ATU	TIP31B
TIP31C	TIP31CTU	TIP32
TIP32A	TIP32ATU	TIP32BTU
TIP32C	TIP32CTU	TIP41
TIP41A	TIP41B	TIP41BTU
TIP41C	TIP41CTU	TIP41CTU_NL
TIP41C_NL	TIP42	TIP42B
TIP42C	TIP42CTU	TIP47
TIP47TU	TIP48	TIP48TU
TIP49	TIP50	TIP50TU
TLC530TU		