



Date Created: 1/4/2004

Date Issued: 1/12/2004

PCN # 20040101

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.**

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

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PCN Originator

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PCN Type: Die Revision

Effectivity

Expected 1st Device Shipment Date: 4/15/2004  
Earliest Year/Work Week of Changed Product: 0416  
(Note: Package marking may differ from this format)

Product ID (Description):

650V/0.5A 1 CHIP FPS

Description of Change:

Control part IC will improve a start up block to reduce leakage current over temperature.

According to this change, part number and marking will be changed as below.

- FSID :

Current => Future

FSDH565 => FSDH565B

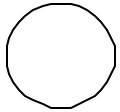
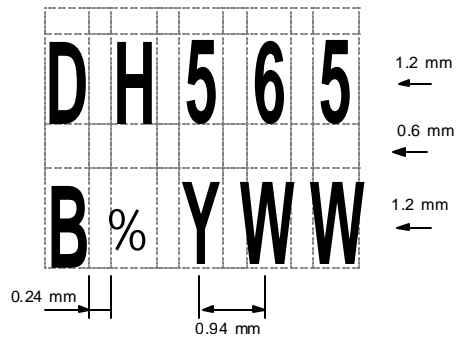
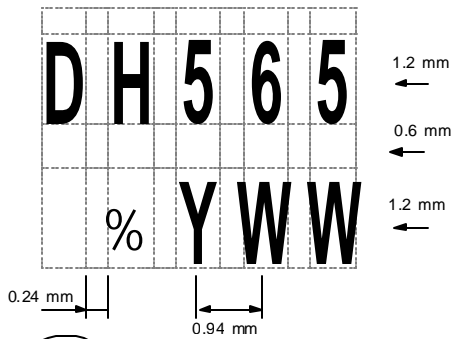
- Die size :  
Current => Future  
2030\*2670um => 2700\*2710um

- Marking change :  
See attached

PKG TYPE : 8-DIPH-300  
\* MARKING INSTRUCTION (TOP)

**SALES CODE : FSDH565**

**SALES CODE : FSDH565B**



#1

\* NOTE :

- 1. % : ASSEMBLY SITE CODE
- 2. YWW : WORK WEEK CODE

Effect of Change:

Following electrical characteristics will be changed.

Current => Future

Peak current limit : 0.25/0.30/0.35A => 0.30/0.35/0.40A (min/typ/max)

Static drain-source on resistance : -/36/39ohm => -/15.6/18ohm (min/typ/max)

Qualification:

Qual/REL Plan Numbers

Additional Qualification Data

**\* The results of reliability test**

Item	Test condition	Sample Size	Read out	Results (failed & tested samples)
HTOL	Ta=125°C , Vdd=100V, VCC=15V	77 ea * 3Lots	168HR,500HR, 1000HR,	0 / 77 ea
HTRB	Ta=150°C , Vdd=520V	77 ea * 3Lots		0 / 77 ea
HTSL	Ta=150°C	77 ea * 3Lots		0 / 77 ea
THBT	Ta=85°C, RH=85%, VCC=15V->11V	77 ea * 3Lots		0 / 77 ea
ACLV	Ta=121°C, RH=100%, 15 PSIG	77 ea * 3Lots	96 Hr	0 / 77 ea
TMCL	Air to air, - 65°C ~ 150°C	77 ea * 3Lots	200/500 Cycle,	0 / 77 ea
Dynamic	Vin=220Vac, Ta=60C	77 ea * 3Lots	96HR, 300HR	0 / 77 ea
ESD	MIL-STD-883 (HBM / MM / CDM) JEDEC	100 ea	-	+ HBM : +/- 1700V over + MM : +/- 300V over + CDM : +/- 500V over

COMMON PIN	Forcing PIN	ESD MODEL					
		HBM(SPEC: ± 2000V?)		MM(SPEC: ± 300V?)		CDM(SPEC: ± 500V?)	
		Po(+)	Ne(-)	Po(+)	Ne(-)	Po(+)	Ne(-)
Pin #3(GND)	Pin #1(Vstr)	1700V	-2000V?	+300V?	-300V?	+500V?	-500V?
	Pin #2(Vfb)	+2000V?	-2000V?	+300V?	-300V?		
	Pin #7(Vcc)	+2000V?	-2000V?	+300V?	-300V?		
	Pin #8(Drain)	+2000V?	-2000V?	+300V?	-300V?		
Pin #7(Vcc)	Pin #1(Vstr)	1800V	-2000V?	+300V?	-300V?		
	Pin #2(Vfb)	+2000V?	-2000V?	+300V?	-300V?		
	Pin #3(GND)	+2000V?	-2000V?	+300V?	-300V?		
	Pin #8(Drain)	+2000V?	-2000V?	+300V?	-300V?		

Affected FSIDs  
FSDH565