



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

11-JUL-2003

SUBJECT: ON Semiconductor Final Product/Process Change Notification #12772

TITLE: MC1413 Qualification At Phenitec

EFFECTIVE DATE: 11-Sep-2003

AFFECTED CHANGE CATEGORY: ON Semiconductor Fab Site

AFFECTED PRODUCT DIVISION: Analog Products Div

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Representative or Joe Duffalo <FFBH9W@onsemi.com>

SAMPLES: Contact Below

Contact your local ON Semiconductor Sales Representative or Bett Lofts <FFBGFX@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Sales Representative or Bett Lofts <FFBGFX@onsemi.com>

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 60 days prior to implementation of the change.

ON Semiconductor will consider this change approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact your local ON Semiconductor Sales Office.

DESCRIPTION AND PURPOSE:

This is the Final PCN to notify customers of the qualification of an additional wafer fab source for the MC1413 device at the Phenitec wafer foundry located in Ibara, Japan. An initial PCN#12772, located at www.onsemi.com, was published on March 11, 2003 providing information on the scope of the program. Phenitec is ISO9001 and QS9000 certified and manufactures other Analog products for ON Semiconductor. The device is currently fabricated at ON Semiconductor's facility in the Czech Republic.

Device parameters will continue to meet all Data Book specifications, and reliability will continue to meet or exceed ON Semiconductor standards.

Samples are available upon request. After the expiration date of this notification, the MC1413 device may be processed at either ON Semiconductor's facility in the Czech Republic or Phenitec.



Final Product/Process Change Notification #12772

RELIABILITY DATA SUMMARY:

QUALIFICATION DATA:

TEST NAME	TEST CONDITIONS	Accept	Read Point	SS	Lots
High Temp(HTOL) Operating Life	Ta = 125DegC for 1008 hrs or Ta = 150DegC for 504 hrs	c=0	0,504,1008	77	3

RELIABILITY DATA SUMMARY:

Results of HTOL Tests:

	Read Point(0Hrs)	Read Point(504Hrs)	Read Point(1008Hrs)	Lot ID
Qual A	0/77	0/77	0/77	
Qual B	0/77	0/77	0/77	
Qual C	0/77	0/77	0/77	

Electrostatic Discharge Sensitivity (ESD)
Human Body Model exceeds 2000V
Machine Model exceeds 400V

ELECTRICAL CHARACTERISTIC SUMMARY:

MC1413 - Characterization Data, Major Parameters

Parameter	Unit	Mean	S.D.	Min.	Max.	Specification	
						Min.	Max.
ICEX	UA	0.086	0.078	0.050	0.530		50
VCEsat	V	1.137	0.010	1.120	1.160		1.6
VCEsat	V	0.974	0.008	0.960	0.990		1.3
VCEsat	V	0.861	0.006	0.850	0.880		1.1
I _{ON}	MA	0.801	0.007	0.790	0.810		1.35
V _{I(ON)2.4}	V	0.990	0.007	0.980	1.010		2.0
V _{I(ON)2.7}	V	1.033	0.008	1.020	1.050		2.0
V _{I(ON)3.0}	V	1.081	0.008	1.060	1.100		2.0
I _{OFF}	UA	0.287	0.021	0.250	0.340		100
Turn-ON	NS	89.124	5.277	66.39	91.92		1000
Turn-Off	NS	243.638	6.931	231.030	255.050		1000
IR	UA	-0.141	0.048	-0.210	-0.030		50
V _F	V	1.363	0.005	1.360	1.370		2

CHANGED PART IDENTIFICATION:

Production shipments after the expiration date of this notification may contain die fabricated from ON Semiconductor's facility in the Czech Republic or Phenitec. Normal assembly lot traceability codes can be used to identify the wafer fab source.

AFFECTED DEVICE LIST (WITHOUT SPECIALS):

PART

- MC1413BD
- MC1413BDR2
- MC1413BP
- MC1413D
- MC1413DR2
- MC1413P