



# DOCUMENT CHANGE REQUEST

DCR number	1378	Changes required for:	General	Originator:	Aissa Nehdi
Date:	2020/10/20	Date sent:	2020/09/17	Organisation:	STMicroelectronics
Status:	IMPLEMENTED				

Title:	Transistors, Low Power, NPN, based on type 2ST15300				
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Number:	5201/020	Issue:	1		
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Other documents affected:

Page:

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Paragraph:

2.5 PARAMETER DRIFT VALUES

Original wording:

V(BR)CBO = 300V min  
-----  
Icbo : limit 1  $\mu$ A max  
-----  
Iebo : limit 200nA max

Proposed wording:

V(BR)CBO = 240V min  
-----  
Icbo : limit 10  $\mu$ A max  
-----  
Iebo : limit 50 $\mu$ A max

Justification:

Alignment to device characterization or performance



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Paragraph:

2.4.1 Room Temperature Electrical Measurements

Original wording:

ICEO= 500nA max

-----  
ICBO : VCE=240v limit 500nA max

-----  
IEBO : VEB =6V limit 100nA max

-----  
Cobo  
100KHz < F < 1MHz  
100 pF Max

-----  
Ton / Toff  
Ic = 1A, Vcc=6.5V  
Vbb=-8V  
Ib1=Ib2=100Ma  
Ton=0.2µs Max  
Toff= 3µs

Proposed wording:

ICEO removed from the table

-----  
ICBO : VCE=300v limit 10µA max

-----  
IEBO : VEB =6V limit 50µA max

-----  
Cobo  
F =1MHz  
120 pF max



# DOCUMENT CHANGE REQUEST

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Originator: Aissa Nehdi

Date: 2020/10/20

Date sent: 2020/09/17

Organisation: STMicroelectronics

Status: IMPLEMENTED

-----  
Ton / Toff

Ic = 3A, Vcc=30V

Ib1=300mA, Ib2=300mA

Ton=0.4µs Max

Toff= 3.5µs

Justification:

Alignment to device characterization or performance

Title: Transistors, Low Power, NPN, based on type 2ST15300

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1

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Paragraph:

1.5 MAXIMUM RATINGS

Original wording:

Ptot1 = 2W

Ptot2= 54W

Rth(j-c) =2.3°C

Proposed wording:

Ptot1 = 2.2W

Ptot2= 40W

Rth(j-c) = 4.38°C

Justification:

Alignment to device characterization or performance



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Paragraph:

1.7 FUNCTIONAL DIAGRAM

Original wording:

PNP diagram

Proposed wording:

NPN diagram

Justification:

Alignment to device characterization or performance



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Paragraph:

2.5 PARAMETER DRIFT VALUES

Original wording:

Icbo : limit 500 nA max

Proposed wording:

Icbo : limit 10  $\mu$ A max

Justification:

Alignment to device characterization or performance



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Paragraph:

2.4.2 High and Low Temperatures Electrical Measurements

Original wording:

Icbo : Vcb=240v limit 1  $\mu$ A max

Proposed wording:

Icbo : Vcb=300v 100  $\mu$ A max

-----  
HFE2 removed from the table

Justification:

Alignment to device characterization or performance



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Paragraph:

2.4.1 Room Temperature Electrical Measurements

Original wording:

Values of resistors  
-----  
Value of Vin= 45V

Proposed wording:

Values of resistors removed  
-----  
Values of Vin removed

Justification:

Alignment to device characterization or performance

Attachments:

esc5201020iss2\_draft\_a\_in\_review.docx, modification\_page7\_&\_10(3).docx

Modifications:

See attached spec mark-up for full change details.

The following change details shall also apply:

Page 9, Para 2.4.1: For Ton & Toff, it is confirmed that VBB = -8V is not changed.

Page 11, Para 2.6: For ICBO, change max limit to be 10µA (was 500nA)

Page 13, Para 2.10.2 (not Para

Approval signature:

A handwritten signature in black ink, appearing to be "A. H. H. H.", written in a cursive style.

Date signed:

2020-10-20