DOCUMENT CHANGE REQUEST

DCR number 1519	Changes required for: General	Originator: Steve Thacker
Date: 2022/10/20	Date sent: 2022/07/29	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED		

Title:	TRANSISTORS, POWER, MOSFET, P-CHANNEL, RAD-HARD BASED ON TYPE STRH12P10		
Number:	5205/029	Issue:	7

Other documents affected:

Page:

12

Paragraph:

Para. 2.6.1 Room Temperature Electrical Measurements

Original wording:

For the following characteristics in Para. 2.6.1:

Turn-on Delay Time [td(on)] maximum limit was: 13ns

Turn-off Delay Time [td(off)] maximum limit was: 42ns

Reverse Recovery Time (trr) test conditions and maximum limit were:
VDS = -60V, ISD = -12A, di/dt = 40A/s, Tj = +25 ±3°C
Maximum limit: 258ns

Proposed wording:

Amend the following characteristics as follows (see also attached spec mark-up: Draft 8A with changes highlighted yellow):

Turn-on Delay Time [td(on)] maximum limit to be: 15.6ns

Turn-off Delay Time [td(off)] maximum limit to be: 50.4ns

Reverse Recovery time (trr) test conditions and maximum limit to be:
VDD = -50V, ISD = -6A, di/dt = 50A/µs, Tcase= +22 ±3°C
Maximum limit: 310ns

Justification:

This DCR is raised on behalf of Manufacturer STM. STM provided the following explanation/justification:
.....
A recent dynamic characterization has been performed on a significant quantity of devices.
This has detected poor marginality and unstable measurements vs. the conditions and limits specified in ESCC5205/029 issue 7.
Accordingly, new limits and conditions have been defined to reflect the product's actual characteristics.
See also attached: STM dynamic test results paper on this subject.

DOCUMENT CHANGE REQUEST

DCR number 1519	Changes required for: General	Originator: Steve Thacker
Date: 2022/10/20	Date sent: 2022/07/29	Organisation: ESCC Executive Secretariat
Status: IMPLEMENTED		

Note: No diffusion process has been changed since the initial ESCC qualification.

Attachments:

escc5205029iss_draft_8a_in_review.docx, dcr_attachment_for_5209029.pdf

Modifications:

N/A

Approval signature:

Date signed:

2022-10-20