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**UPDATE NOTIFICATION**  
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**03-OCT-2002**

**SUBJECT: ON Semiconductor Update Notification #12580**

**TITLE: Update Notification to FPCN#11500 - Qualification of Assembly & Test Site for C-77 (TO-126) Discrete Packaged Products.**

**EFFECTIVE DATE: 03-Oct-2002**

**AFFECTED CHANGE CATEGORY: Subcontractor Assembly Site**

**AFFECTED PRODUCT DIVISION: Bipolar Discretes Products Div**

**ADDITIONAL RELIABILITY DATA:** Available

Contact your local ON Semiconductor Sales Office or Laura Rivers <S20636@onsemi.com>

**SAMPLES:** Contact your local ON Semiconductor Sales Office or Barbara Matteson <[RM2230@onsemi.com](mailto:RM2230@onsemi.com)>

**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact Sales Office or Jose Ramirez<[RVEG40@onsemi.com](mailto:RVEG40@onsemi.com)>

**DISCLAIMER:**

Initial Product/Process Change Notification (IPCEN) -First Notification distributed to customers. Distributed at least 120 days from the effective date of the change.

Final Product/Process Change Notification (FPCN) -Final Notification completing the notification process. Distributed at least 60 days from the effective date 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 an Update Notification to PCN #11500. The qualification and transfer of Thyristor Case 77 (TO-126) to sub-contractor PSI in Manila, Philippines has been canceled due to a change in business initiatives. Current supplier source will continue.

**RELIABILITY DATA SUMMARY:**

Bipolar Rel Data

TEST	Interval	BD436T				MJE340			
		Lot#1	Lot#2	Lot#3	Control	Lot#1	Lot#2	Lot#3	Control
Autoclave	96hrs	0/84	0/84	0/84	0/84	0/84	0/84	0/84	0/84
Temp Cyc	1K Cyc	0/84	0/84	0/84	0/84	0/84	0/84	0/84	0/84
HTRB	1008 hrs	0/84	0/84	0/84	0/84	0/84	0/84	0/84	0/84
H3TRB	1008 hrs					0/77	0/77	0/77	
IOL	8572 Cyc	0/84	0/84	0/84	0/84	0/84	0/84	0/84	0/84



**ELECTRICAL CHARACTERISTIC SUMMARY:**

Bipolar Characterization Data:

Electrical parameter comparison after 4286 IOL cycles MJE430

	Lot 1		lot2	
	mean	stdev	mean	stdev
ICBO	5.73E-09	8.56E-10	5.72E-09	8.44E-10
IEBO	3.85E-07	1.74E-07	3.90E-07	1.79E-07
ICEO	6.26E-07	3.44E-07	6.20E-07	3.43E-07
HFE	1.56E+02	2.54E+01	1.57E+02	2.42E+01
HFE	1.57E+02	2.47E+01	1.57E+02	2.42E+01
HFE	1.59E+02	2.37E+01	1.59E+02	2.32E+01

  

	lot3		Control lot	
	mean	stdev	mean	stdev
ICBO	5.63E-09	8.56E-10	5.71E-09	8.44E-10
IEBO	3.75E-07	1.74E-07	3.89E-07	1.79E-07
ICEO	6.16E-07	3.44E-07	6.19E-07	3.43E-07
HFE	1.47E+02	2.47E+01	1.56E+02	2.42E+01
HFE	1.47E+02	2.47E+01	1.56E+02	2.42E+01
HFE	1.49E+02	2.37E+01	1.58E+02	2.37E+01

Electrical parameter comparison after 4286 IOL cycles BD436T

	Lot 1		lot2	
	mean	stdev	mean	stdev
IEBO	4.49E-09	1.09E-09	4.42E-09	9.97E-10
BVEBO	1.45E+01	9.34E-01	1.45E+01	9.35E-01
ICBO	5.94E-09	4.41E-09	9.34E-09	2.28E-09
VCESAT	2.22E-01	1.69E-02	2.22E-01	1.69E-02
VBEON	4.68E-01	7.30E-02	4.68E-01	7.30E-02
HFE	7.19E+02	2.15E+02	7.20E+02	2.15E+02
HFE	3.60E+02	8.15E+01	3.60E+02	8.15E+01
HFE	3.60E+02	8.15E+01	3.60E+02	8.15E+01
HFE	8.48E+01	1.87E+01	8.48E+01	1.87E+01

  

	lot3		Control lot	
	mean	stdev	mean	stdev
IEBO	4.42E-09	9.98E-10	4.41E-09	1.20E-09
BVEBO	1.45E+01	9.35E-01	1.45E+01	9.33E-01
ICBO	9.33E-09	2.28E-09	9.35E-09	2.27E-09
VCESAT	2.22E-01	1.69E-02	2.22E-01	1.69E-02
VBEON	4.68E-01	7.30E-02	4.68E-01	7.30E-02
HFE	7.20E+02	2.15E+02	7.19E+02	2.15E+02
HFE	3.60E+02	8.15E+01	3.60E+02	8.14E+01
HFE	3.60E+02	8.15E+01	3.60E+02	8.14E+01
HFE	8.48E+01	1.87E+01	8.47E+01	1.87E+01

**AFFECTED DEVICE LIST (WITHOUT SPECIALS):**

**PART**

2N4918, 2N4919, 2N4920, 2N4921, 2N4922, 2N4923, 2N5190, 2N5191, 2N5192, 2N5194, 2N5195, 2N5655, 2N5657, 2N6034, 2N6035, 2N6036, 2N6038, 2N6039, BD135, BD136, BD137, BD138, BD139, BD140, BD159, BD179, BD180, BD234, BD237, BD238, BD435, BD436, BD436T, BD437, BD437T, BD438, BD439, BD440, BD441, BD442, BD675, BD675A, BD676, BD676A, BD677, BD677A, BD678, BD678A, BD679, BD679A, BD680, BD680A, BD680T, BD681, BD682, BD682T, BD787, BD788, BD791, BUE51, MJE13003, MJE170, MJE171, MJE172, MJE180, MJE181, MJE182, MJE200, MJE210, MJE210T, MJE243, MJE253, MJE270, MJE271, MJE340, MJE3439, MJE344, MJE350, MJE371, MJE521, MJE700, MJE702, MJE703, MJE800, MJE802, MJE803, SJE2894