



Final Product/Process Change Notification

Document #:FPCN26304XF

Issue Date:15 Sep 2026

Title of Change:	Qualification of onsemi ISMF Fab (Malaysia) and onsemi OSV (Vietnam) for Low VCE(sat) Bipolar Junction Transistor devices housed in DPAK package.
Proposed First Ship date:	22 Dec 2026 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office
PCN Samples Contact:	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
Additional Reliability Data:	Contact your local onsemi Sales Office
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com
Marking of Parts/ Traceability of Change:	Changed material can be identified by date code or lot code
Change Category:	Assembly Change, Wafer Fab Change
Change Sub-Category(s):	Manufacturing Process Change, Material Change, Manufacturing Site Transfer

Sites Affected:

onsemi Sites	External Foundry/Subcon Sites
onsemi Vietnam	None
onsemi, ISMF Malaysia	

Description and Purpose:

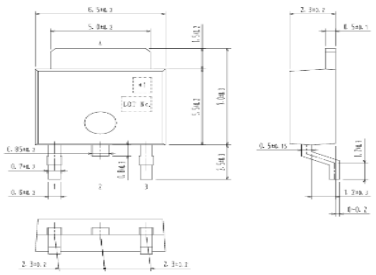
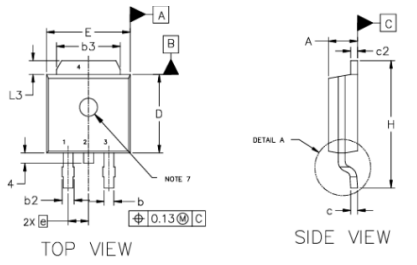
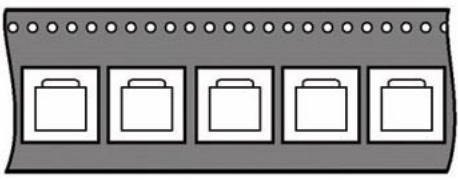
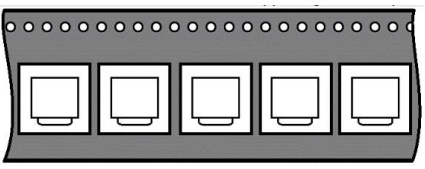
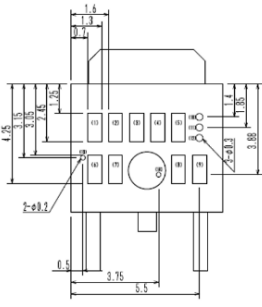
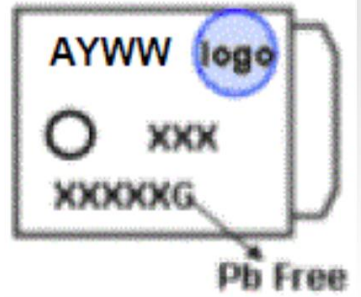
This final notification announces the qualification of the onsemi ISMF fab (Malaysia) and Assembly and Test Site of onsemi OSV (Vietnam) for Low VCE(sat) Bipolar Junction Transistor devices housed in the DPAK package. These changes also include wire change from Au to Cu.

onsemi ISMF fab and onsemi OSV, Vietnam have been an existing qualified manufacturing site for onsemi and certified with IATF16949:2016 for the wafer fabrication site and ISO 9001:2015 for the Assembly and Test site.

Included in the change are several bill of material changes to standardize BOM aligning it with the existing onsemi Low VCE(sat) Bipolar Junction Transistor product family.

DPAK package

	From	To	
Fab site	JS Foundry, Japan	JS Foundry, Japan	onsemi, ISMF Malaysia
Wafer probe site	JS Foundry, Japan	JS Foundry, Japan	onsemi, ISMF Malaysia
Assembly and Test Site	onsemi, Shenzhen, China	onsemi, Shenzhen, China	OSV, Vietnam
Wafer front metal	Al	Al	AlSi + TiW + Al
Wafer back metal	AuSb or TiNiAu	AuSb or TiNiAu	TiNiAg
LeadFrame	EFTEC3	EFTEC3	DPAK-3 Single Gauge Short LF
Mold Compound	MP Showa Denko	MP Showa Denko	Sumitomo G700HF
Bond Wire	Au wire	Au wire	Bare Cu wire

Case Outline	369AH 	369C 
Device Taping	 Heat Sink Toward Upper Center - Towards Round Sprocket Holes	 Heat Sink Toward Lower Center - Opposing Round Sprocket Holes
Product Packing	MPQ Quantity: 700 Full Box Container Quantity: 2,800	MPQ Quantity: 2,500 Full Box Container Quantity: 7,500
Product marking change for DPAK package	From  8= Year 9 = Month 10-12 = Work Week 13 = Assembly Location	To  A = Assembly Location Y = Year WW = Work Week G = Pb-Free Package

Reliability Data Summary:

QV DEVICE NAME : 2SB1215S-TL-E

RMS : 98726

PACKAGE : DPAK

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	3/240
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hrs	3/240
Preconditioning	J-STD-020 JESD-A113	MSL 1 @260°C	-	0/240
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2min	15,000 cyc	0/240
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/240
High Humidity High Temp Rev Bias	JESD22-A110	Ta=85°C, 85% RH, 80% rated or 100V max	1008 Hrs	0/240
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
Resistance to Solder Heat	JESD22- B106	Ta = 268°C, 10 sec	-	0/30

QV DEVICE NAME : 2SD1816T-TL-H

RMS : 98725

PACKAGE : DPAK

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/240
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hrs	0/240
Preconditioning	J-STD-020 JESD-A113	MSL 1 @260°C	-	0/240
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2min	15,000 cyc	0/240
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/240
High Humidity High Temp Rev Bias	JESD22-A110	Ta=85°C, 85% RH, 80% rated or 100V max	1008 Hrs	0/240
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
Resistance to Solder Heat	JESD22- B106	Ta = 268°C, 10 sec	-	0/30

Electrical Characteristics Summary:

Electrical characteristics are not impacted



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List of Affected Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the **PCN Customized Portal**.

Current Part Number	New Part Number	Qualification Vehicle
2SD1816T-TL-H	#NONE	2SD1816T-TL-H
2SC4135T-TL-E	#NONE	2SD1816T-TL-H
2SC4027S-TL-H	#NONE	2SD1816T-TL-H
2SD1803T-TL-H	#NONE	2SD1816T-TL-H
2SA1593S-TL-E	#NONE	2SB1215S-TL-E
2SA2039-TL-E	#NONE	2SB1215S-TL-E
2SB1215S-TL-E	#NONE	2SB1215S-TL-E
2SC6097-TL-E	#NONE	2SD1816T-TL-H
2SC5707-TL-E	#NONE	2SD1816T-TL-H
2SC5706-TL-H	#NONE	2SD1816T-TL-H
2SC5706-TL-E	#NONE	2SD1816T-TL-H
2SC4027S-TL-E	#NONE	2SD1816T-TL-H