



Final Product/Process Change Notification

Document #:FPCN23449XB

Issue Date:13 Dec 2021

Title of Change:	Assembly and Test Transfer from AUK Dalian, China to JCET CHUZHOU, China for TO92 Products, Case Outline 29-11 Change for TO92 Products.
Proposed First Ship date:	20 Mar 2022 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Jireh.Dulla@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office or PCN.Support@onsemi.com 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 or Lalan.Ortega@onsemi.com
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:	Product marked with date code PM (YW) or later may be built from current factory or from JCET. On the label of the box and reel, the ASSY LOC: JC will also indicate product assembled in JCET. Please see sample label on Page 2 at the following URL http://www.onsemi.com/pub/Collateral/LABELRM-D.PDF to see the location of the ASSY LOC.
Change Category:	Assembly Change, Test Change
Change Sub-Category(s):	Manufacturing Site Transfer, Material Change

Sites Affected:

onsemi Sites	External Foundry/Subcon Sites
None	JCET, China

Description and Purpose:

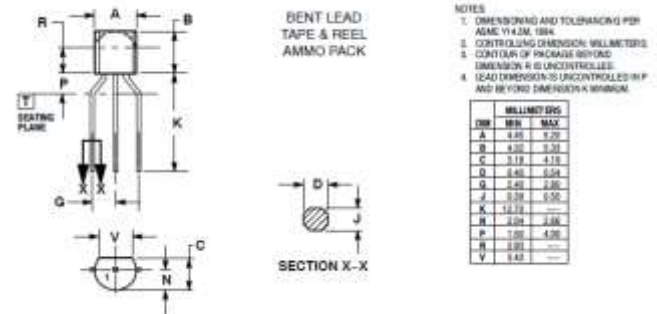
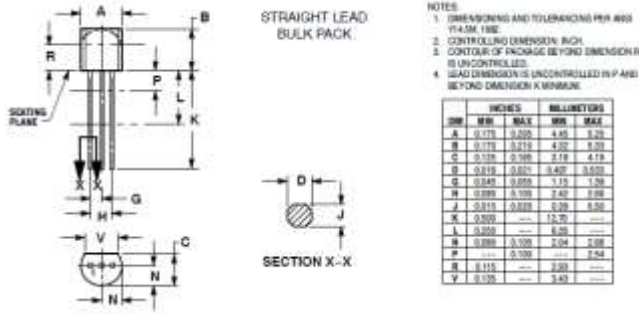
onsemi would like to inform customers of the intent to transfer assembly and test for the TO92 products listed in this notification from the current site, AUK Dalian, China to JCET CHUZHOU, China. BOM (Bill of Materials) changes are listed below:

	Before Change Description	After Change Description
LeadFrame	KDMM-B005(95X95 MIL C/G TO-92 AUK)	LF TO92L 3L CuAg STAMPED
Die Attach	ABLE843-001(EPOXY ABLE STICK)	ABLEBOND 84-3J
Mold Compound	7EMC1040(HFMOLD COMPOUND EME-E120G)	EMG-460-3
Assembly Site	AUKD	JCET China

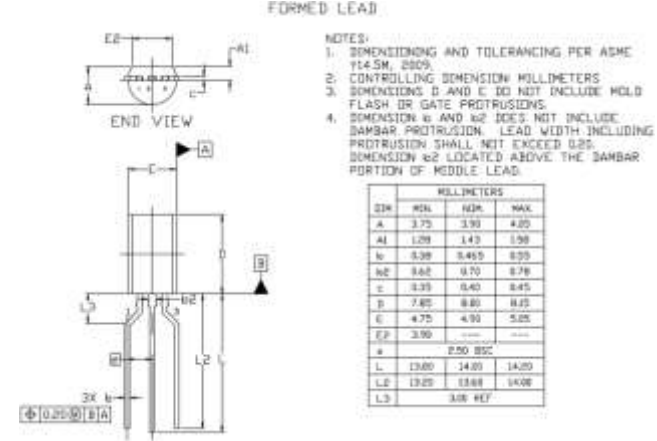
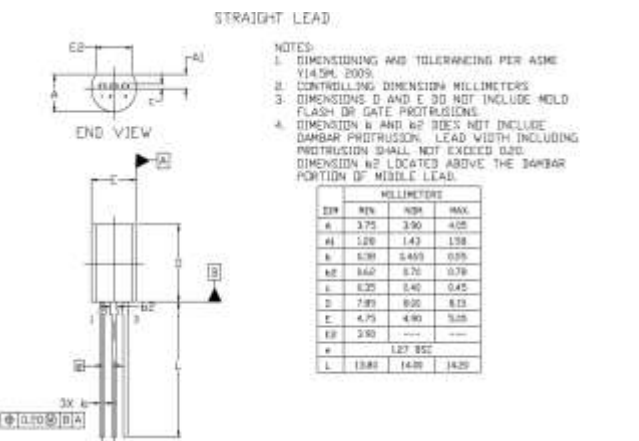
Product marking changes are shown here:

	From	To
Product marking change	Trace Code Assembly Location Line 3: W(LYW) L: Wafer Lot Number YW: Assembly Start Week	Trace Code Assembly Location Line 3: JC(LYW) L: Wafer Lot Number YW: Assembly Start Week Note: No Pb Free Microdot

Before Change:



After Change:



Reliability Data Summary:

QV DEVICE NAME: **MC33164P-5RPG**
 RMS: **S78897, O80079**
 PACKAGE: **TO-92**

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta = 125°C, 100 % max rated Vcc	1008 hrs	0 / 231
HTSL	JESD22-A103	Ta = 150°C	1008 hrs	0 / 231
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0 / 231
HAST	JESD22-A110	110°C, 85% RH, 18.8psig, bias	264 hrs	0 / 231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0 / 231
DPA	AEC Q101 -004	Destructive Physical Analysis Following TC and HAST		0 / 6
RSH	JESD22-B106	Ta = 265°C, 10 sec		0 / 90
SD	JESD22-B102E	Ta = 245°C, 5 sec		0 / 45
PD	JESD22-B100B	Per case outline		0 / 30
LI	JESD22-B105D	Lead Fatigue (30 leads)		0 / 30
ED	Electrical Distribution / Characterization	Per 48A		0 / 90

Electrical Characteristics Summary:



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Electrical Characteristic are not impacted.

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**.

Part Number	Qualification Vehicle
MC33064P-5G	MC33164P-5RPG
MC33064P-5RAG	MC33164P-5RPG
MC33064P-5RPG	MC33164P-5RPG
MC33164P-3G	MC33164P-5RPG
MC33164P-3RAG	MC33164P-5RPG
MC33164P-3RPG	MC33164P-5RPG
MC33164P-5G	MC33164P-5RPG
MC33164P-5RAG	MC33164P-5RPG
MC33164P-5RPG	MC33164P-5RPG
MC34064P-5G	MC33164P-5RPG
MC34064P-5RAG	MC33164P-5RPG
MC34064P-5RMG	MC33164P-5RPG
MC34064P-5RPG	MC33164P-5RPG
MC34164P-3G	MC33164P-5RPG
MC34164P-3RPG	MC33164P-5RPG
MC34164P-5G	MC33164P-5RPG

Appendix A: Changed Products

PCN#: FPCN23449XB
Issue Date: Dec 12, 2021

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
MC33064P-5G		MC33164P-5RPG		
MC33064P-5RAG		MC33164P-5RPG		
MC33164P-3RAG		MC33164P-5RPG		
MC33164P-5G		MC33164P-5RPG		
MC33164P-5RPG		MC33164P-5RPG		
MC34064P-5G		MC33164P-5RPG		
MC34064P-5RAG		MC33164P-5RPG		
MC34064P-5RMG		MC33164P-5RPG		
MC34064P-5RPG		MC33164P-5RPG		
MC34164P-3G		MC33164P-5RPG		
MC34164P-3RPG		MC33164P-5RPG		
MC34164P-5G		MC33164P-5RPG		
MC33164P-3RPG		MC33164P-5RPG		