Final Product/Process Change Notification

Document #:FPCN23449XC
Issue Date:10 Mar 2022

Title of Change:	Assembly and Test Transfer from AUK Dalian, China to JCET CHUZHOU, China for TO92 Products, Case Outline from 29-11 to 29-10 Change for TO92 Products.
Proposed First Ship date:	17 Jun 2022 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or albert.reyes@onsemi.com
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 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 (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:	Test Change, Assembly Change
Change Sub-Category(s):	Material Change, Manufacturing Site Transfer

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
None	JCET, China

Description and Purpose:

onsemi would like to inform customers of the transfer assembly and test for the TO92 products listed in this notification from the current site, AUK Dalian, China to JCET CHUZHOU, China. AUK Dalian ceased operations on 03/01/2021 and manufacturing is no longer possible in this location. All future manufacturing support will be provided by JCET. The BOM (Bill of Materials) changes are listed below:

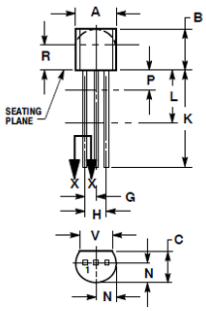
Components/Sites	Before Change Description	After Change Description
LeadFrame	PMC90-1/2H	LF TO92L 3L CuAg STAMPED
Die Attach	ABLE843-001	84-1 LMISR4
Assembly and Test Sites	AUK Dalian, China	JCET Chuzhou, China,

onsemi would also like to inform customers of changes to the case outline for the TO92 products listed in this notification. The drawing number will change from 29-11 to 29-10, and the dimension changes are listed below:

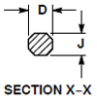
Final Product/Process Change Notification

Document #:FPCN23449XC
Issue Date:10 Mar 2022

Before Change

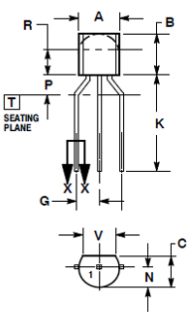


STRAIGHT LEAD
BULK PACK

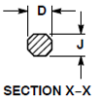


NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.
3. CONTOUR OF PACKAGE BEYOND DIMENSION R IS UNCONTROLLED.
4. LEAD DIMENSION IS UNCONTROLLED IN P AND BEYOND DIMENSION K MINIMUM.

	INCHES		MILLIMETERS	
DIM	MIN	MAX	MIN	MAX
A	0.175	0.205	4.45	5.20
B	0.170	0.210	4.32	5.33
C	0.125	0.165	3.18	4.19
D	0.016	0.021	0.407	0.533
G	0.045	0.055	1.15	1.39
H	0.095	0.105	2.42	2.66
J	0.015	0.020	0.39	0.50
K	0.500	---	12.70	---
L	0.250	---	6.35	---
N	0.080	0.105	2.04	2.66
P	---	0.100	---	2.54
R	0.115	---	2.93	---
V	0.135	---	3.43	---



BENT LEAD
TAPE & REEL
AMMO PACK

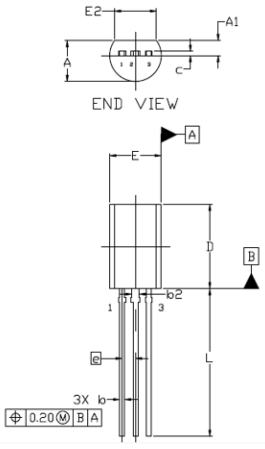


NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. CONTOUR OF PACKAGE BEYOND DIMENSION R IS UNCONTROLLED.
4. LEAD DIMENSION IS UNCONTROLLED IN P AND BEYOND DIMENSION K MINIMUM.

	MILLIMETERS	
DIM	MIN	MAX
A	4.45	5.20
B	4.32	5.33
C	3.18	4.19
D	0.40	0.54
G	2.40	2.80
J	0.39	0.50
K	12.70	---
N	2.04	2.66
P	1.50	4.00
R	2.93	---
V	3.43	---

After Change

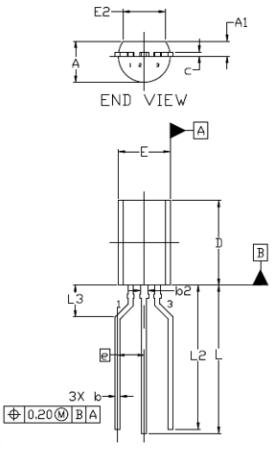
STRAIGHT LEAD



NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 2009.
2. CONTROLLING DIMENSION: MILLIMETERS
3. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH OR GATE PROTRUSIONS.
4. DIMENSION b AND b2 DOES NOT INCLUDE DAMBAR PROTRUSION. LEAD WIDTH INCLUDING PROTRUSION SHALL NOT EXCEED 0.20. DIMENSION b2 LOCATED ABOVE THE DAMBAR PORTION OF MIDDLE LEAD.

	MILLIMETERS		
DIM	MIN.	NOM.	MAX.
A	3.75	3.90	4.05
A1	1.28	1.43	1.58
b	0.38	0.465	0.55
b2	0.62	0.70	0.78
c	0.35	0.40	0.45
D	7.85	8.00	8.15
E	4.75	4.90	5.05
E2	3.90	---	---
e	1.27 BSC		
L	13.80	14.00	14.20

FORMED LEAD



NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 2009.
2. CONTROLLING DIMENSION: MILLIMETERS
3. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH OR GATE PROTRUSIONS.
4. DIMENSION b AND b2 DOES NOT INCLUDE DAMBAR PROTRUSION. LEAD WIDTH INCLUDING PROTRUSION SHALL NOT EXCEED 0.20. DIMENSION b2 LOCATED ABOVE THE DAMBAR PORTION OF MIDDLE LEAD.

	MILLIMETERS		
DIM	MIN.	NOM.	MAX.
A	3.75	3.90	4.05
A1	1.28	1.43	1.58
b	0.38	0.465	0.55
b2	0.62	0.70	0.78
c	0.35	0.40	0.45
D	7.85	8.00	8.15
E	4.75	4.90	5.05
E2	3.90	---	---
e	2.50 BSC		
L	13.80	14.00	14.20
L2	13.20	13.60	14.00
L3	3.00 REF		

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

Reliability Data Summary:

QV DEVICE NAME : LP2950CZ-5.0RAG
RMS: S81060, O81070 Qual lot S82382 – THB
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	500 cyc	0 / 231
THB	JESD22-A110	Ta = 85°C, 85% RH, bias	1008 hrs	0 / 231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0 / 231
RSH	JESD22- B106	Ta = 265C, 10 sec		0 / 90
SD	JSTD002	Ta = 245C, 5 sec		0 / 45
PD	JESD22-B100	Per Case Outline		0 / 30
LI	JESD22-B105	Lead Bend test		0 / 30
DPA	AEC-Q101-004	Destructive Physical Analysis Following TC	500 cycl	0 / 6
DPA	AEC-Q101-004	Destructive Physical Analysis following THB	1008 hrs	0 / 6

Electrical Characteristics Summary:

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
LP2950ACZ-3.0RAG	LP2950CZ-5.0G
LP2950ACZ-5.0G	LP2950CZ-5.0G
LP2950ACZ-5.0RAG	LP2950CZ-5.0G
LP2950CZ-3.0RAG	LP2950CZ-5.0G
LP2950CZ-5.0G	LP2950CZ-5.0G
LP2950CZ-5.0RAG	LP2950CZ-5.0G
LP2950CZ-5.0RPG	LP2950CZ-5.0G
LP2950ACZ-3.3G	LP2950CZ-5.0G
LP2950ACZ-3.3RAG	LP2950CZ-5.0G
LP2950CZ-3.3G	LP2950CZ-5.0G
LP2950CZ-3.3RAG	LP2950CZ-5.0G
MC79L05ABPRAG	LP2950CZ-5.0G
MC79L05ACPG	LP2950CZ-5.0G
MC79L05ACPRAG	LP2950CZ-5.0G
MC79L12ABPG	LP2950CZ-5.0G

MC79L12ABPRAG	LP2950CZ-5.0G
MC79L12ACPG	LP2950CZ-5.0G
MC79L12ACPRAG	LP2950CZ-5.0G
MC79L12ACPRPG	LP2950CZ-5.0G
MC79L15ABPG	LP2950CZ-5.0G
MC79L15ABPRPG	LP2950CZ-5.0G
MC79L15ACPG	LP2950CZ-5.0G
MC79L15ACPRAG	LP2950CZ-5.0G
MC79L15ACPRPG	LP2950CZ-5.0G
LP2950CZ-3.0G	LP2950CZ-5.0G
LP2950ACZ-3.0G	LP2950CZ-5.0G
MC79L05ACPRMG	LP2950CZ-5.0G
MC79L05ACPRPG	LP2950CZ-5.0G
MC79L15ACPREG	LP2950CZ-5.0G
MC79L18ABPRPG	LP2950CZ-5.0G
MC79L18ACPG	LP2950CZ-5.0G
MC79L24ABPG	LP2950CZ-5.0G
MC79L24ACPG	LP2950CZ-5.0G
MC79L24ACPRMG	LP2950CZ-5.0G
MC79L24ACPRPG	LP2950CZ-5.0G
LM285Z-1.2G	LP2950CZ-5.0G
LM285Z-1.2RAG	LP2950CZ-5.0G
LM285Z-2.5G	LP2950CZ-5.0G
LM285Z-2.5RAG	LP2950CZ-5.0G
LM285Z-2.5RPG	LP2950CZ-5.0G
LM385BZ-1.2G	LP2950CZ-5.0G
LM385Z-2.5RPG	LP2950CZ-5.0G
LM385Z-2.5G	LP2950CZ-5.0G
LM385Z-1.2RPG	LP2950CZ-5.0G
LM385Z-1.2RAG	LP2950CZ-5.0G
LM385Z-1.2G	LP2950CZ-5.0G
LM385BZ-2.5G	LP2950CZ-5.0G
LM385BZ-1.2RAG	LP2950CZ-5.0G