ON Semiconductor®

Product Discontinuance

Document #:PD23009XA
Issue Date:24 Nov 2020

Title of Change:	Product Discontinuance Notification - New package introduction
Last Time Buy Date:	24 May 2021
Last Ship Date:	24 Nov 2021
Contact information:	Contact your local ON Semiconductor Sales Office or Yuna.Im@onsemi.com
Type of notification:	Customers must notify ON Semiconductor (<PCN.Support@onsemi.com >) in writing within 90 days of receipt of this notification if they consider the discontinued product to be "Sole Source." ON Semiconductor and the customer may negotiate an appropriate End-of-Life.

Description and Purpose:

As a result of the discontinuation of Samsung mold compound SG8300HK, the replacement mold compound is being introduced along with a change to the package outline, adopting an improved ultra-narrow TO220FP package outline providing improvements for customer PCB design applications due to narrower pin dimension. Also enables manufacturing expansion for capacity improvement.

	Before Change Description	**After Change Description**
LeadFrame	TO220FP 3L BARE Cu 1X20 STAMPED	TO-220F 3L Bare Cu 1x20 STAMPED
Die Attach	SOLDER PbSn5Ag2.5	SOLDER Pb93.5Sn5Ag1.5
Bond Wire	Aluminum 5mil 15mil / 5mi 20mil	Aluminum 5mil 15mil / 5mil 20mil
Mold Compound	SG8300HK	KTMC-3097GXB
Assembly Site	Tak Cheong Electronics Shanwei	Shantou Huashan Electronic Devices

	From	**To**
Product marking change	C	SH

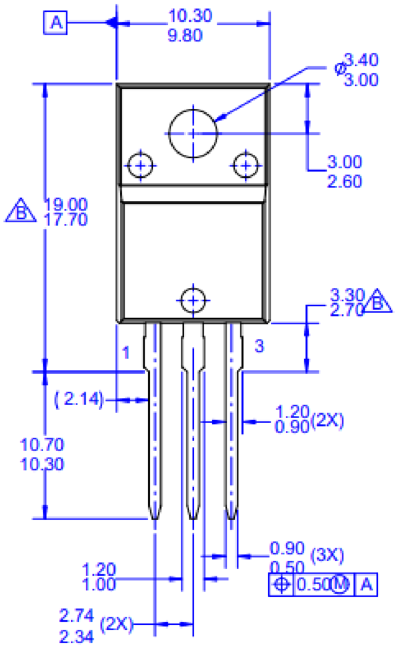
Package outline Drawing :

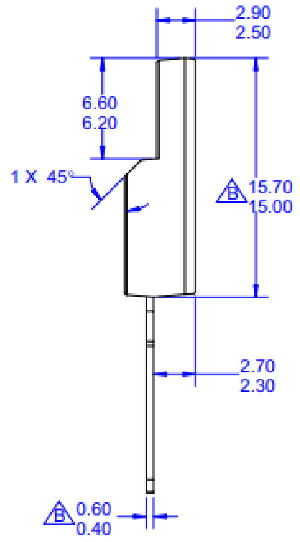
	From Case# 340BF		**To Case # 221BN**	
	MIN (mm)	**MAX (mm)**	**MIN (mm)**	**MAX (mm)**
A	4.30	4.60	4.60	4.80
A1	2.50	2.90	2.50	2.70
A2	2.30	2.70	2.47	2.67
b	0.50	0.90	0.56	0.69
b1	0.90	1.20	-	-
b2	1.00	1.20	-	0.90
c	0.40	0.60	0.46	0.59
D	15.00	15.70	15.80	16.20
D1	-	-	9.58	9.78
E	9.80	10.30	10.00	10.40
e	2.34	2.74	2.54 BSC	
H/H1	6.20	6.60	6.32 REF	
L	10.30	10.70	13.45	13.75
L1	2.70	3.30	1.70	1.90
L2	17.70	19.00	-	-
ØP	3.00	3.40	3.00	3.20
Q	2.60	3.00	3.25	3.45
ϴ	45°		-	
J	N/A		-	
K	N/A		-	

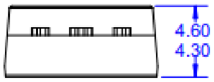
From : Case# 340BF

TO−220 FULLPAK 3LD
CASE 340BF
ISSUE O

DATE 31 AUG 2016







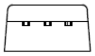
NOTES:

A. EXCEPT WHERE NOTED CONFORMS TO EIAJ SC91A.
B. DOES NOT COMPLY EIAJ STD. VALUE.
C. ALL DIMENSIONS ARE IN MILLIMETERS.
D. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR PROTRUSIONS.
E. DIMENSION AND TOLERANCE AS PER ASME Y14.5−2009.

To : Case # 221BN

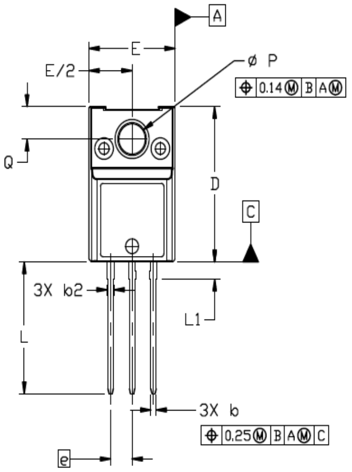
TO−220 FULLPACK, 3−LEAD
CASE 221BN
ISSUE O

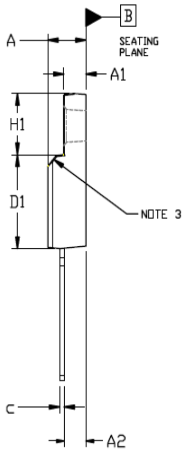
DATE 12 DEC 2018



NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS
3. CONTOUR UNCONTROLLED IN THIS AREA.
4. DIMENSIONS EXCLUDE BURRS, MOLD FLASH, AND TIE BAR PROTRUSIONS.





DIM	MILLIMETERS		
	MIN.	NOM.	MAX.
A	4.60	4.70	4.80
A1	2.50	2.60	2.70
A2	2.47	2.57	2.67
b	0.56	0.63	0.69
b2	---	---	0.90
c	0.46	0.53	0.59
D	15.80	16.00	16.20
D1	9.58	9.68	9.78
E	10.00	10.20	10.40
e	2.54 BSC		
H1	6.32 REF		
L	13.45	13.60	13.75
L1	1.70	1.80	1.90
P	3.00	3.10	3.20
Q	3.25	3.35	3.45

Qualification Result :

QV DEVICE NAME: FCPF250N65S3L1
RMS: U71272, O71422
PACKAGE: TO-220F

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0 / 231
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0 / 231
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0 / 231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 3.5 min	8572 Cyc	0 / 120
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0 / 231
H3TRB	JEDS22 A101	Ta = 85°C, 85% RH, V=80% rated V	1008 hrs	0 / 231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0 / 231
RSH	JESD22- B106	Ta = 265°C, 10 sec		0 / 90
SD	J-STD-002	Ta = 245°C, 5 sec	0 hr	0 / 15
PD	JESD22-B100B	Per POD / Case outline Verify physical dimensions to specifications	0 hr	0 / 30
SAT	JESD22-A104, Appendix 6 J-STD-035		0 hr	0 / 22
LI	JESD22-B105D	Lead Integrity	0 hr	0 / 30
ED	Electrical Distribution / Characterization	Tri Temperature, Per 48A	0 hr	0 / 30
TR	JESD-24-3, 24-4, 24-6 as appropriate	per device specification, pre & post process change	0 hr	0 / 10

Some of the devices contained in this notice may be part of a product portfolio renewal process or a manufacturing facility closure. ON Semiconductor continually monitors worldwide sales and billings activities on all the products offered to its customers.

ON Semiconductor wishes to promptly inform our customer of our intent to exit this small portion of our overall portfolio so that you may plan appropriately and effectively for replacement devices.

ON Semiconductor has provided a list of replacement devices, where available, to aid in this process.

PLEASE NOTE: ON Semiconductor may implement minimum order quantities or dollar amounts based on inventories available. Also, Devices on this Product Discontinuance become NCNR (Non-Cancelable, Non-Returnable).

For questions or concerns regarding this notification, please contact your local sales office or customer service representative.

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NOTE: UPON PUBLICATION OF THIS DISCONTINUANCE NOTICE, ON SEMICONDUCTOR ALLOWS SIX (6) MONTHS FROM THE NOTICE DATE TO PLACE FINAL LIFETIME PURCHASE ORDERS. ACCEPTANCE IS SUBJECT TO REASONABLE ORDER QUANTITIES, PRODUCT AVAILABILITY AND ALL OTHER APPLICABLE TERMS AND CONDITIONS

NOTE: TO ALLOW AN ORDERLY EXIT FROM THE MARKET, PRODUCT SHALL NOT BE DELIVERED AFTER SIX (6) MONTHS BEYOND THE ANNOUNCEMENT DATE.

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.***

Device to be Discontinued	Replacement part	Supplier
FCPF250N65S3L1	FCPF250N65S3L1-F154	ON Semiconductor
FCPF250N65S3R0L	FCPF250N65S3R0L-F154	ON Semiconductor
FCPF360N65S3R0L	FCPF360N65S3R0L-F154	ON Semiconductor
FCPF600N65S3R0L	FCPF600N65S3R0L-F154	ON Semiconductor