



Title of Change:	Assembly and Test Transfer From AUK Dalian China to JCET Chuzhou China with Case outline change for SOT23FL products
Proposed First Ship date:	16 Mar 2021 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or albert.reyes@onsemi.com
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office or < PCN.samples@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 ON Semiconductor 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. ON Semiconductor 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:	Traceability will be maintained in the encoded product marking. Product labeling will indicate the location of manufacturing.
Change Category:	Assembly Change, Test Change
Change Sub-Category(s):	Manufacturing Site Transfer, Material Change

Sites Affected:

ON Semiconductor Sites	External Foundry/Subcon Sites
None	JCET, China
	AUK - Dalian

Description and Purpose:

ON Semiconductor would like to inform customers of the assembly and test transfer for SOT23FL 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	PMC90 Ag STAMPED	A194 stamped
Die Attach	Exbond 8280C	Henkel DA 84-1
Mold Compound	KCC KTMC1050GR	EDALE ELER 8100HFE
Assembly Site	AUK-Dalian	JCET Chuzhou
Test Site	AUK-Dalian	JCET Chuzhou
case outline	419BD	Image shown below.

	From	To
Product marking change	XXXX Where : XXX: device marking	XXXM Where : XXXX: device marking M: Date code and site location

As indicated above, this transfer includes a change from the current case outline, or package outline drawing. The images below are provided for convenience and review. These packages have compatible solder landing patterns.



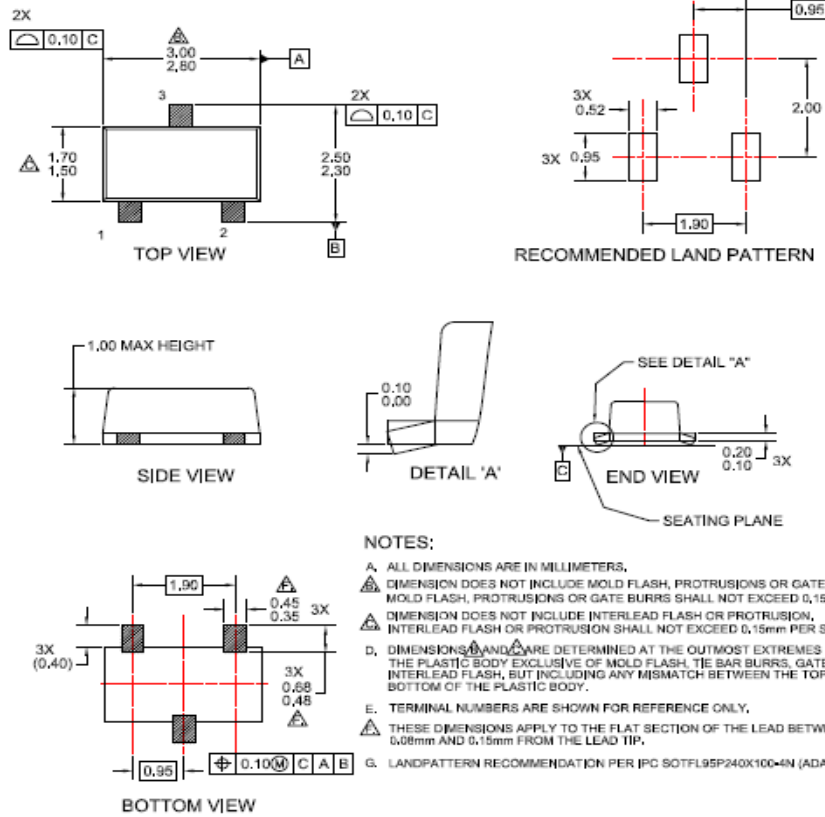
AUK Dalian – Before Change

MECHANICAL CASE OUTLINE PACKAGE DIMENSIONS



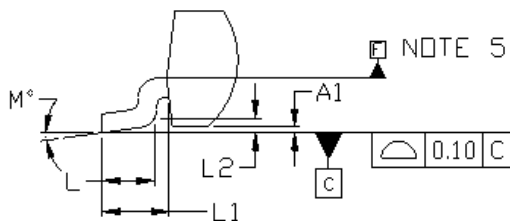
SOT-23FL
CASE 419BD
ISSUE O

DATE 31 AUG 2016





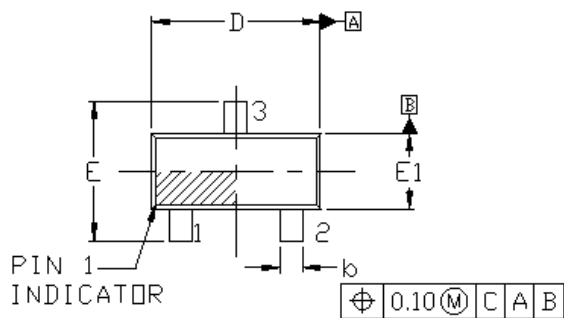
JCET Chuzhou – After Change



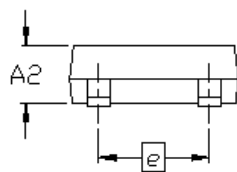
- NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 2009
 2. CONTROLLING DIMENSION: MILLIMETERS
 3. DIMENSION b DOES NOT INCLUDE BARRER PROTRUSION. ALLOWABLE PROTRUSION SHALL BE 0.027 mm IN EXCESS OF MAXIMUM MATERIAL CONDITION.
 4. DIMENSIONS D AND E1 DO NOT INCLUDE MOLD FLASH, PROTRUSIONS, OR GATE BURRS. MOLD FLASH, PROTRUSIONS, OR GATE BURRS SHALL NOT EXCEED 0.15 mm PER SIDE. DIMENSIONS D AND E1 ARE DETERMINED AT DATUM F.
 5. DATUMS A AND B ARE TO BE DETERMINED AT DATUM F.
 6. A1 IS DEFINED AS THE VERTICAL DISTANCE FROM THE SEATING PLANE TO THE LOWEST POINT ON THE PACKAGE BODY.
 7. LEAD THICKNESS (c) AND LEAD WIDTH (b) INCLUDE PLATING THICKNESS.

DETAIL A

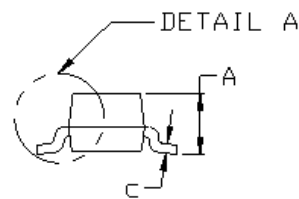
DIM	MILLIMETERS		
	MIN.	NOM.	MAX.
A	---	---	1.15
A1	0.00	---	0.10
A2	0.90	1.00	1.10
b	0.30	---	0.50
c	0.127 REF		
D	2.80	2.90	3.00
E	2.25	2.40	2.55
E1	1.20	1.30	1.40
e	1.90 BSC		
L	0.30	---	---
LL	0.55 REF		
L2	0.25 REF		
N	0°	---	8°



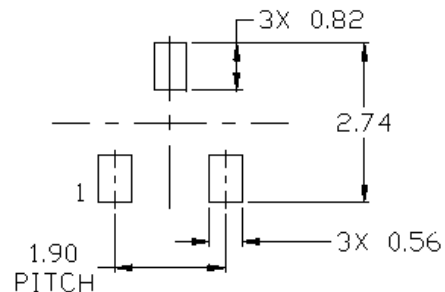
TOP VIEW



SIDE VIEW



END VIEW



RECOMMENDED MOUNTING FOOTPRINT

* For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.



Reliability Data Summary:

QV DEVICE NAME: KA431SLMF2TF

RMS: S69084, O69455

PACKAGE: SOT-23

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta=150°C, 80% 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 = 2.0 min	15,000 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
AC	JESD22-A102	Ta = 121°C, 100% RH, 15.5psig, 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	POD, Case outline	0 hr	0 / 30
LI	JESD22-B105D	Lead integrity	0 hr	0 / 30
ED	Electrical Distribution / Characterization	Tri Temperature, Per 48A	0 hr	0 / 30
TC	JESD-24-3, 24-4, 24-6 as appropriate	Thermal Comparison, per device specification, pre & post process change	0 hr	0 / 10

Electrical Characteristics Summary:

Electrical characteristics 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
KA431SAMF2TF	KA431SLMF2TF
KA431SAMFTF	KA431SLMF2TF
KA431SLMF2TF	KA431SLMF2TF
KA431SLMFTF	KA431SLMF2TF
KA431SMF2TF	KA431SLMF2TF
KA431SMFTF	KA431SLMF2TF
LM431SACMFX	KA431SLMF2TF
LM431SAIMFX	KA431SLMF2TF



Final Product/Process Change Notification

Document #:FPCN23465X

Issue Date:09 Dec 2020

LM431SBCMFX	KA431SLMF2TF
LM431SBIMFX	KA431SLMF2TF
LM431SCCMFX	KA431SLMF2TF
LM431SCIMFX	KA431SLMF2TF

Japanese translation of the notification starts here.
通知の日本語訳はここから始まります。

Note: The Japanese version is for reference only. In case of any differences between the English and Japanese version, the English version shall control.

注：日本語版は参照用です。英語版と日本語版の違いがある場合は、英語版が優先されます。



最終製品 / プロセス変更通知

文書番号# : FPCN23465X

発行日: 09 Dec 2020

変更件名:	SOT23FL 製品のケースアウトライン変更を伴う AUK 大連(中国)から JCET 滁州(中国)への組立および検査移管																												
初回出荷予定日:	16 Mar 2021 またはお客様からの承認が得られた場合はそれ以前																												
連絡先情報:	現地のオン・セミコンダクター営業所または albert.reyes@onsemi.com にお問い合わせください。																												
サンプル:	現地のオン・セミコンダクター営業所または PCN.samples@onsemi.com にお問い合わせください。 サンプルは、この変更の初回通知、初回 PCN の日付から 30 日以内に要求してください。 サンプル納入時は、依頼日、数量、特別梱包材/ラベル条件によって異なります。																												
追加の信頼性データ:	お客さまの地域のオン・セミコンダクター営業所または Lalan.Ortega@onsemi.com にお問い合わせください。																												
通知種別:	これは、お客様宛の最終製品 / プロセス変更通知 (FPCN) です。FPCN は、変更実施の 90 日前に発行されます。 オン・セミコンダクターは、この通知の送付から 30 日以内に書面による問い合わせがない限り、この変更が承諾されたものとみなします。お問い合わせは PCN.Support@onsemi.com 宛てにお願いします。																												
変更部品の識別:	トレーサビリティはコード化した製品マーキングで引き続き維持可能です。製造拠点は製品ラベルによって識別されます。																												
変更カテゴリ:	組立の変更, 検査の変更																												
変更サブカテゴリ:	製造拠点の移管, 材料の変更																												
影響を受ける拠点:																													
オン・セミコンダクター拠点:	外部製造工場 / 下請業者拠点:																												
なし	JCET, China																												
	AUK - Dalian																												
説明および目的:	<p>オン・セミコンダクターは、本通知に記載されている SOT23FL 製品の組立および検査について、現拠点の AUK 大連(中国) から JCET 滁州(中国) に移管することをお客様にお知らせいたします。BOM (部品表) の変更は以下の通りです。</p> <table border="1"> <thead> <tr> <th></th> <th>変更前の表記</th> <th>変更後の表記</th> </tr> </thead> <tbody> <tr> <td>リードフレーム</td> <td>PMC90 Ag STAMPED</td> <td>A194 stamped</td> </tr> <tr> <td>ダイ接着剤</td> <td>Exbond 8280C</td> <td>Henkel DA 84-1</td> </tr> <tr> <td>モールドコンパウンド</td> <td>KCC KTMC1050GR</td> <td>EDALE ELER 8100HFE</td> </tr> <tr> <td>組立拠点</td> <td>AUK-Dalian</td> <td>JCET Chuzhou</td> </tr> <tr> <td>検査拠点</td> <td>AUK-Dalian</td> <td>JCET Chuzhou</td> </tr> <tr> <td>ケースアウトライン</td> <td>419BD</td> <td>以下に図示します。</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th></th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>製品マーキング変更</td> <td>XXXX 場所: XXX: 製品マーキング</td> <td>XXXXM 場所: XXXX: 製品マーキング M: 日付コードおよび製造拠点</td> </tr> </tbody> </table>			変更前の表記	変更後の表記	リードフレーム	PMC90 Ag STAMPED	A194 stamped	ダイ接着剤	Exbond 8280C	Henkel DA 84-1	モールドコンパウンド	KCC KTMC1050GR	EDALE ELER 8100HFE	組立拠点	AUK-Dalian	JCET Chuzhou	検査拠点	AUK-Dalian	JCET Chuzhou	ケースアウトライン	419BD	以下に図示します。		From	To	製品マーキング変更	XXXX 場所: XXX: 製品マーキング	XXXXM 場所: XXXX: 製品マーキング M: 日付コードおよび製造拠点
	変更前の表記	変更後の表記																											
リードフレーム	PMC90 Ag STAMPED	A194 stamped																											
ダイ接着剤	Exbond 8280C	Henkel DA 84-1																											
モールドコンパウンド	KCC KTMC1050GR	EDALE ELER 8100HFE																											
組立拠点	AUK-Dalian	JCET Chuzhou																											
検査拠点	AUK-Dalian	JCET Chuzhou																											
ケースアウトライン	419BD	以下に図示します。																											
	From	To																											
製品マーキング変更	XXXX 場所: XXX: 製品マーキング	XXXXM 場所: XXXX: 製品マーキング M: 日付コードおよび製造拠点																											
	<p>上記のように、本移管には現行のケースアウトライン、またはパッケージ外形図からの変更が含まれます。以下の図を参照してください。これらのパッケージのはんだランドパターンは互換性があります。</p>																												



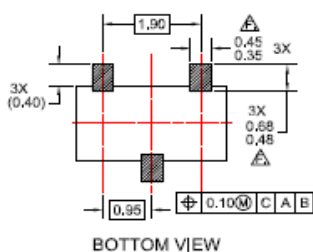
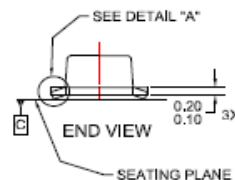
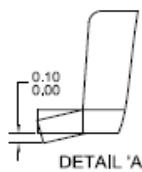
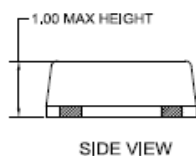
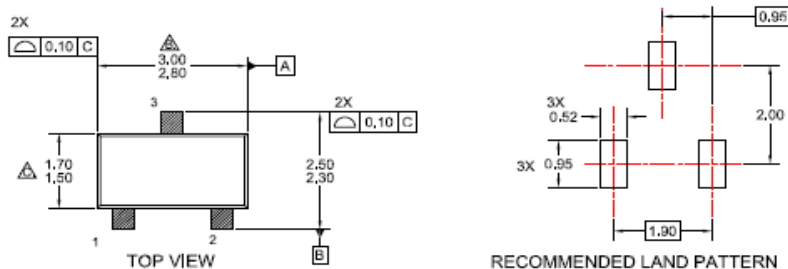
AUK Dalian – Before Change

MECHANICAL CASE OUTLINE PACKAGE DIMENSIONS



SOT-23FL
CASE 419BD
ISSUE 0

DATE 31 AUG 2018

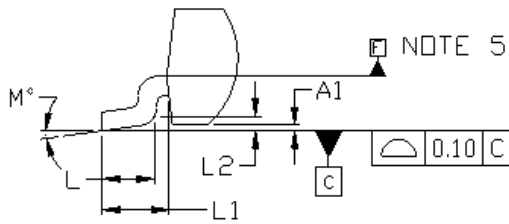


NOTES:

- A. ALL DIMENSIONS ARE IN MILLIMETERS.
- △ DIMENSION DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS, MOLD FLASH, PROTRUSIONS OR GATE BURRS SHALL NOT EXCEED 0,15mm PER END.
- △ DIMENSION DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSION, INTERLEAD FLASH OR PROTRUSION SHALL NOT EXCEED 0,15mm PER SIDE.
- D. DIMENSIONS AND ARE DETERMINED AT THE OUTMOST EXTREMES OF THE PLASTIC BODY EXCLUSIVE OF MOLD FLASH, TIE BAR BURRS, GATE BURRS AND INTERLEAD FLASH, BUT INCLUDING ANY MISMATCH BETWEEN THE TOP AND BOTTOM OF THE PLASTIC BODY.
- E. TERMINAL NUMBERS ARE SHOWN FOR REFERENCE ONLY.
- △ THESE DIMENSIONS APPLY TO THE FLAT SECTION OF THE LEAD BETWEEN 0,08mm AND 0,15mm FROM THE LEAD TIP.
- G. LANDPATTERN RECOMMENDATION PER IPC SOTFL95P240X100-4N (ADAPTED TO 3LD)



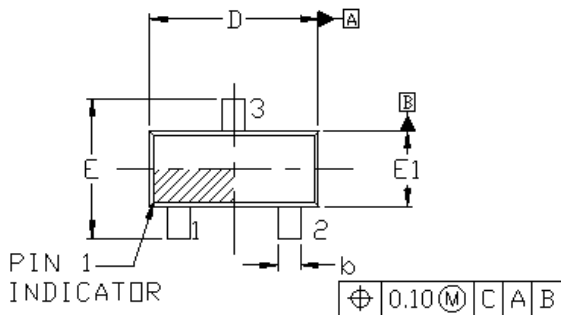
JCET Chuzhou – 変更後



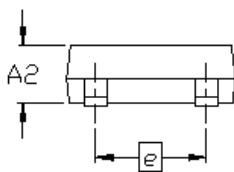
DETAIL A

- NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 2009
 2. CONTROLLING DIMENSION: MILLIMETERS
 3. DIMENSION D DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE PROTRUSION SHALL BE 0.127 mm IN EXCESS OF MAXIMUM MATERIAL CONDITION.
 4. DIMENSIONS D AND E1 DO NOT INCLUDE MOLD FLASH, PROTRUSIONS, OR GATE BURRS. MOLD FLASH, PROTRUSIONS, OR GATE BURRS SHALL NOT EXCEED 0.15 mm PER SIDE. DIMENSIONS D AND E1 ARE DETERMINED AT DATUM F.
 5. DATUMS A AND B ARE TO BE DETERMINED AT DATUM F.
 6. A1 IS DEFINED AS THE VERTICAL DISTANCE FROM THE SEATING PLANE TO THE LOWEST POINT ON THE PACKAGE BODY.
 7. LEAD THICKNESS (c) AND LEAD WIDTH (b) INCLUDE PLATING THICKNESS.

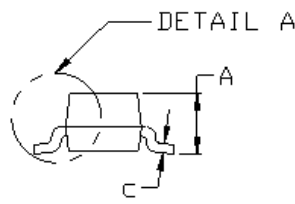
DIM	MILLIMETERS		
	MIN.	NOM.	MAX.
A	---	---	L15
A1	0.00	---	0.10
A2	0.90	1.00	1.10
b	0.30	---	0.50
c	0.127 REF		
D	2.80	2.90	3.00
E	2.25	2.40	2.55
E1	1.20	1.30	1.40
e	1.90 BSC		
L	0.30	---	---
L1	0.55 REF		
L2	0.25 REF		
N	0°	---	8°



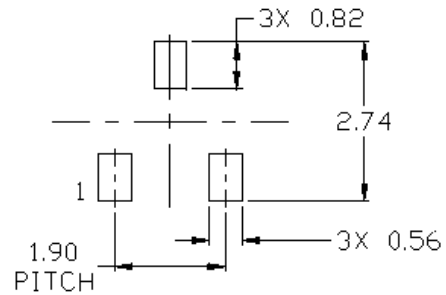
TOP VIEW



SIDE VIEW



END VIEW



RECOMMENDED MOUNTING FOOTPRINT

* For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.



信頼性データの要約:

デバイス名: KA431SLMF2TF

RMS: S69084, O69455

パッケージ: SOT23

テスト	仕様	条件	間隔	結果
HTRB	JESD22-A108	Ta=150°C, 80% 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 = 2.0 min	15,000 cyc	0 / 120
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0 / 231
H3TRB	JESD22 A101	Ta = 85°C, 85% RH, V=80% rated V	1008 hrs	0 / 231
AC	JESD22-A102	Ta = 121°C, 100% RH, 15.5psig, 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	POD, Case outline	0 hr	0 / 30
LI	JESD22-B105D	Lead integrity	0 hr	0 / 30
ED	Electrical Distribution / Characterization	Tri Temperature, Per 48A	0 hr	0 / 30
TC	JESD-24-3, 24-4, 24-6 as appropriate	Thermal Comparison, per device specification, pre & post process change	0 hr	0 / 10

電気的特性の要約:

電気的特性への影響はありません。

影響を受ける部品の一覧:

注: 部品一覧には標準部品番号 (既製品) のみが記載されています。本 PCN の影響を受けるカスタム部品番号は、PCN メールで提供される顧客個別の付録、または PCN カスタマイズポータルに記載されています。

部品番号	認定試験用ピークル
KA431SAMF2TF	KA431SLMF2TF
KA431SAMFTF	KA431SLMF2TF
KA431SLMF2TF	KA431SLMF2TF
KA431SLMFTF	KA431SLMF2TF
KA431SMF2TF	KA431SLMF2TF
KA431SMFTF	KA431SLMF2TF
LM431SACMFX	KA431SLMF2TF
LM431SAIMFX	KA431SLMF2TF
LM431SBCMFX	KA431SLMF2TF



最終製品 / プロセス変更通知

文書番号# : FPCN23465X

発行日: 09 Dec 2020

LM431SBIMFX	KA431SLMF2TF
LM431SCCMFX	KA431SLMF2TF
LM431SCIMFX	KA431SLMF2TF



Appendix A: Changed Products

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
KA431SAMF2TF		KA431SLMF2TF	NA	
KA431SAMFTF		KA431SLMF2TF	NA	
KA431SLMF2TF		KA431SLMF2TF	NA	
KA431SLMFTF		KA431SLMF2TF	NA	
KA431SMFTF		KA431SLMF2TF	NA	
LM431SACMFX		KA431SLMF2TF	NA	
LM431SAIMFX		KA431SLMF2TF	NA	
LM431SBCMFX		KA431SLMF2TF	NA	
LM431SCCMFX		KA431SLMF2TF	NA	