



Final Product/Process Change Notification

Document #:FPCN22761X

Issue Date:03 Jan 2020

Title of Change:	TO-220 NON-JEDEC POD parts dual source from ON Semiconductor Suzhou, China (ONSZ) to HuaShan.
Proposed First Ship date:	10 Apr 2020 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or Lisa.Wang@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 Lake.Wang@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:	Plant code in marking with "SH" is from HuaShan
Change Category:	Assembly Change, Test Change
Change Sub-Category(s):	Manufacturing Site Addition
Sites Affected:	
ON Semiconductor Sites	External Foundry/Subcon Sites
None	SHANTOU HUASHAN Electronic Devices Co., Ltd., China

Description and Purpose:

This notification announces to customers of ON Semiconductor's plan to dual source TO-220 Non-Jedec parts from ON Semiconductor Suzhou, China to HUASHAN on the list of affected parts below. This is for capacity expansion in ON Semiconductor Suzhou, China TO220 JEDEC parts.

At the end of the FPCN approval cycle, these products will be from ON Semiconductor Suzhou, China and HUASHAN, China.

HUASHAN is currently running production for TO-220 package. Qualification tests are designed to show that the reliability of the transferred devices will continue to meet or exceed ON Semiconductor standards.

	Before Change Description	After Change Description	
LeadFrame	KFC - 1/2H, 12SnOFC Cu base, dual gauge stamped frame	KFC - 1/2H, 12SnOFC Cu base, dual gauge stamped frame	KFC - 1/2H Cu base, dual gauge stamped frame
Mold Compound	Samsung: SG8200DL, SI7200DX2 (KCC: KTMC-1050GFB after FPCN22647XJ approved)	Samsung: SG8200DL, SI7200DX2 (KCC: KTMC-1050GFB after FPCN22647XJ approved)	KCC: KTMC-1050GFB
Assembly & Test Site	ON Semiconductor Suzhou, China	ON Semiconductor Suzhou, China	HUASHAN

	From	To
Product marking change	1 st line Plant code "1" ON Suzhou	1 st line Plant code "1" ON Suzhou ; "SH" HUASHAN



Reliability Data Summary:

QV DEVICE NAME: FDP22N50N

RMS : U57354

PACKAGE : TO220

Test	Specification	Condition	Interval	Lot Results
HTRB	JESD22-A108	Tj = max rate Tj for 1,008 hours, 80% BV	1,008 hrs	0/77
HTGB	JESD22-A108	Ti= Maximum rated junction temperature, Vgss Bias = 100% of max rated	1,008 hrs	0/77
HTSL	JESD22-A103	Ta = Max rate storage temp for device	1,008 hrs	0/77
IOL	MIL-STD-750, M1037 AEC-Q101	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5mins	8572 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1,000 cyc	0/77
H3TRB	JESD22-A101	Temp = 85C, RH=85%, bias = 80% of rated V or 100V max	1008hrs	0/77
UHASt	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96hr	0/77
RSH	JESD22-B106	Ta=265C 10 sec dwell, electrical test before and after	10s	0/77
SD	J-STD-002	Ta=245C 5 sec dwell	10s	0/77
Tri-Temp		Characterization of all 48A parameters		0/30
Thermal resistance	JESD24-3, 24-4, 24-6 as appropriate	Measure TR to assure specification compliance and provide process change comparison data.		0/10
PD		Per Case Outline		0/30
BPS	MIL-STD883 Method 2011	Per ass'y spec		0/10
BS	AEC-Q101-003	Per ass'y spec		0/10
DSS	MIL-STD883 Method 2019	Per ass'y spec		0/10

QV DEVICE NAME: FQP12P20

RMS : U57531

PACKAGE : TO220

Test	Specification	Condition	Interval	Lot Results
HTRB	JESD22-A108	Tj = max rate Tj for 1,008 hours, 80% BV	1,008 hrs	0/77
HTGB	JESD22-A108	Ti= Maximum rated junction temperature, Vgss Bias = 100% of max rated	1,008 hrs	0/77
HTSL	JESD22-A103	Ta = Max rate storage temp for device	1,008 hrs	0/77
IOL	MIL-STD-750, M1037 AEC-Q101	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5mins	8572 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1,000 cyc	0/77
H3TRB	JESD22-A101	Temp = 85C, RH=85%, bias = 80% of rated V or 100V max	1008hrs	0/77
UHASt	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96hr	0/77
RSH	JESD22-B106	Ta=265C 10 sec dwell, electrical test before and after	10s	0/77
SD	J-STD-002	Ta=245C 5 sec dwell	10s	0/77
Tri-Temp		Characterization of all 48A parameters		0/30
Thermal resistance	JESD24-3, 24-4, 24-6 as appropriate	Measure TR to assure specification compliance and provide process change comparison data.		0/10
PD		Per Case Outline		0/30
BPS	MIL-STD883 Method 2011	Per ass'y spec		0/10
BS	AEC-Q101-003	Per ass'y spec		0/10
DSS	MIL-STD883 Method 2019	Per ass'y spec		0/10



QV DEVICE NAME: FQP13N50

RMS : U57532

PACKAGE : TO220

Test	Specification	Condition	Interval	Lot Results
HTRB	JESD22-A108	Tj = max rate Tj for 1,008 hours, 80% BV	1,008 hrs	0/77
HTGB	JESD22-A108	Ti= Maximum rated junction temperature, Vgss Bias = 100% of max rated	1,008 hrs	0/77
HTSL	JESD22-A103	Ta = Max rate storage temp for device	1,008 hrs	0/77
IOL	MIL-STD-750, M1037 AEC-Q101	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5mins	8572 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1,000 cyc	0/77
H3TRB	JESD22-A101	Temp = 85C, RH=85%, bias = 80% of rated V or 100V max	1008hrs	0/77
UHASt	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96hr	0/77
RSH	JESD22-B106	Ta=265C 10 sec dwell, electrical test before and after	10s	0/77
SD	J-STD-002	Ta=245C 5 sec dwell	10s	0/77
Tri-Temp		Characterization of all 48A parameters		0/30
Thermal resistance	JESD24-3, 24-4, 24-6 as appropriate	Measure TR to assure specification compliance and provide process change comparison data.		0/10
PD		Per Case Outline		0/30
BPS	MIL- STD883 Method 2011	Per ass'y spec		0/10
BS	AEC-Q101-003	Per ass'y spec		0/10
DSS	MIL-STD883 Method 2019	Per ass'y spec		0/10

QV DEVICE NAME: FDP047N10

RMS : V57533/V62042

PACKAGE : TO220

Test	Specification	Condition	Interval	Lot Results
HTRB	JESD22-A108	Tj = max rate Tj for 1,008 hours, 80% BV	1,008 hrs	0/77
HTGB	JESD22-A108	Ti= Maximum rated junction temperature, Vgss Bias = 100% of max rated	1,008 hrs	0/77
HTSL	JESD22-A103	Ta = Max rate storage temp for device	1,008 hrs	0/77
IOL	MIL-STD-750, M1037 AEC-Q101	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5mins	8572 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1,000 cyc	0/77
H3TRB	JESD22-A101	Temp = 85C, RH=85%, bias = 80% of rated V or 100V max	1008hrs	0/77
UHASt	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96hr	0/77
RSH	JESD22-B106	Ta=265C 10 sec dwell, electrical test before and after	10s	0/77
SD	J-STD-002	Ta=245C 5 sec dwell	10s	0/77
Tri-Temp		Characterization of all 48A parameters		0/30
Thermal resistance	JESD24-3, 24-4, 24-6 as appropriate	Measure TR to assure specification compliance and provide process change comparison data.		0/10
PD		Per Case Outline		0/30
BPS	MIL- STD883 Method 2011	Per ass'y spec		0/10
BS	AEC-Q101-003	Per ass'y spec		0/10
DSS	MIL-STD883 Method 2019	Per ass'y spec		0/10



QV DEVICE NAME: FCP36N60N
 RMS : V57534/V62043
 PACKAGE : TO220

Test	Specification	Condition	Interval	Lot Results
HTRB	JESD22-A108	Tj = max rate Tj for 1,008 hours, 80% BV	1,008 hrs	0/77
HTGB	JESD22-A108	Ti= Maximum rated junction temperature, Vgss Bias = 100% of max rated	1,008 hrs	0/77
HTSL	JESD22-A103	Ta = Max rate storage temp for device	1,008 hrs	0/77
IOL	MIL-STD-750, M1037 AEC-Q101	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5mins	8572 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1,000 cyc	0/77
H3TRB	JESD22-A101	Temp = 85C, RH=85%, bias = 80% of rated V or 100V max	1008hrs	0/77
UHAST	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96hr	0/77
RSH	JESD22-B106	Ta=265C 10 sec dwell, electrical test before and after	10s	0/77
SD	J-STD-002	Ta=245C 5 sec dwell	10s	0/77
Tri-Temp		Characterization of all 48A parameters		0/30
Thermal resistance	JESD24-3, 24-4, 24-6 as appropriate	Measure TR to assure specification compliance and provide process change comparison data.		0/10
PD		Per Case Outline		0/30
BPS	MIL-STD883 Method 2011	Per ass'y spec		0/10
BS	AEC-Q101-003	Per ass'y spec		0/10
DSS	MIL-STD883 Method 2019	Per ass'y spec		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
FDPO32N08-F102	FDP047N10
FQP4N80	FQP13N50
FQP50N06L	FQP13N50
FQP55N10	FQP13N50
FQP65N06	FQP13N50
FQP7N20	FQP13N50



FQP85N06	FQP13N50
FQP9N30	FQP13N50
FDP22N50N	FDP22N50N
FDP18N20F	FDP22N50N
FDP18N50	FDP22N50N
FDP20N50	FDP22N50N
FDP20N50F	FDP22N50N
FQP4N20L	FQP13N50
FQP44N10	FQP13N50
FQP3N30	FQP13N50
FQP34N20	FQP13N50
FQP30N06L	FQP13N50
FQP30N06	FQP13N50
FQP2N90	FQP13N50
FQP2N40-F080	FQP13N50
FQP27N25	FQP13N50
FQP22N30	FQP13N50
FQP20N06L	FQP13N50
FQP19N20-T	FQP13N50
FDP24N40	FDP22N50N
FDP26N40	FDP22N50N
FQP10N20C	FDP22N50N
FQP12N60C	FDP22N50N
FQP16N25C-F105	FDP22N50N
FQP32N20C	FDP22N50N
FQP3N50C-F080	FDP22N50N
FQP6N60C	FDP22N50N
IRF634B-FP001	FDP22N50N
FQP16N25	FQP13N50
FQP14N30	FQP13N50
FQP13N50	FQP13N50
FQP9P25	FQP12P20
FQP11P06	FQP12P20
FQP13N10	FQP13N50



FQP4P40	FQP12P20
FQP17P10	FQP12P20
FDP047N10	FDP047N10
FQP3N80C	FDP22N50N
FQP4N90C	FDP22N50N
FQP6N40C	FDP22N50N
FQP6N90C	FDP22N50N
FQP8N80C	FDP22N50N
FQP8N90C	FDP22N50N
FQP9N90C	FDP22N50N
IRF530A	FDP22N50N
IRL640A	FDP22N50N
SFP9530	FDP22N50N
FQP20N06	FQP13N50
FQP17N40	FQP13N50
FQP8P10	FQP12P20
FQP7P06	FQP12P20
FQP3P20	FQP12P20
FQP2P40-F080	FQP12P20
FQP17P06	FQP12P20
FQP15P12	FQP12P20
FQP12P10	FQP12P20
FQP12P20	FQP12P20
FCP36N60N	FCP36N60N
FDP054N10	FDP047N10
FDP032N08	FDP047N10
FDP030N06	FDP047N10
FDP025N06	FDP047N10
FQP19N20	FQP13N50
FQP47P06	FQP12P20
FQP3P50	FQP12P20
FDP023N08B-F102	FDP047N10

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# : FPCN22761X

発行日: 03 Jan 2020

変更件名:	TO-220 NON-JEDEC 品のオン・セミコンダクター蘇州、中国 (ONSZ) と HuaShan のデュアルソース化。		
初回出荷予定日:	10 Apr 2020 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 <Lisa.Wang@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 <Lake.Wang@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:	「SH」のマーキングの工場コードは HuaShan です。		
変更カテゴリ:	組立変更, 検査の変更		
変更サブカテゴリ:	製造拠点の追加		
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:		
無し	SHANTOU HUASHAN Electronic Devices Co., Ltd., China		
説明および目的:	<p>この通知は、以下に示す対象製品の TO-220 NON JEDEC 製品を、オン・セミコンダクターの中国の蘇州から HuaShan とのデュアルソースにする計画をお客様に案内します。目的は TO220 JEDEC 製品のオン・セミコンダクター蘇州における生産能力を拡大することです。</p> <p>FPCN 承認サイクルが完了した時点で、対象製品はオン・セミコンダクター蘇州 (中国) と HuaShan (中国) から供給されます。</p> <p>HuaShan は現在 TO-220 パッケージの製造を行っています。認定試験は、移管された製品の信頼性が引き続きオン・セミコンダクターの基準以上となることを確認できるように設計されています。</p>		
Process	変更前の表記	変更後の表記	
リードフレーム	KFC - 1/2H, 12SnOFC Cu base, デュアルゲージスタンピングフレーム	KFC - 1/2H, 12SnOFC Cu base, デュアルゲージスタンピングフレーム	KFC - 1/2H Cu base, dual ゲージスタンピングフレーム
モールド・コンパウンド	Samsung: SG8200DL, SI7200DX2 (KCC: KTMC-1050GFB after FPCN22647XJ approved)	Samsung: SG8200DL, SI7200DX2 (KCC: KTMC-1050GFB after FPCN22647XJ approved)	KCC: KTMC-1050GFB
組立・検査拠点	ON Semiconductor Suzhou, China	ON Semiconductor Suzhou, China	HUASHAN
	変更前	変更後	
製品マーキング変更	1 st line Plant code "1" ON Suzhou	1 st line Plant code "1" ON Suzhou ; "SH" HUASHAN	



信頼性データの要約:

デバイス名 : FDP22N50N

RMS : U57354

パッケージ : TO220

テスト	仕様	条件	間隔	結果
HTRB	JESD22-A108	Tj = max rate Tj for 1,008 hours, 80% BV	1,008 hrs	0/77
HTGB	JESD22-A108	Ti= Maximum rated junction temperature, Vgss Bias = 100% of max rated	1,008 hrs	0/77
HTSL	JESD22-A103	Ta = Max rate storage temp for device	1,008 hrs	0/77
IOL	MIL-STD-750, M1037 AEC-Q101	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5mins	8572 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1,000 cyc	0/77
H3TRB	JESD22-A101	Temp = 85C, RH=85%, bias = 80% of rated V or 100V max	1008hrs	0/77
UHASt	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96hr	0/77
RSH	JESD22-B106	Ta=265C 10 sec dwell, electrical test before and after	10s	0/77
SD	J-STD-002	Ta=245C 5 sec dwell	10s	0/77
Tri-Temp		Characterization of all 48A parameters		0/30
Thermal resistance	JESD24-3, 24-4, 24-6 as appropriate	Measure TR to assure specification compliance and provide process change comparison data.		0/10
PD		Per Case Outline		0/30
BPS	MIL-STD883 Method 2011	Per ass'y spec		0/10
BS	AEC-Q101-003	Per ass'y spec		0/10
DSS	MIL-STD883 Method 2019	Per ass'y spec		0/10

デバイス名: FQP12P20

RMS : U57531

パッケージ: TO220

テスト	仕様	条件	間隔	結果
HTRB	JESD22-A108	Tj = max rate Tj for 1,008 hours, 80% BV	1,008 hrs	0/77
HTGB	JESD22-A108	Ti= Maximum rated junction temperature, Vgss Bias = 100% of max rated	1,008 hrs	0/77
HTSL	JESD22-A103	Ta = Max rate storage temp for device	1,008 hrs	0/77
IOL	MIL-STD-750, M1037 AEC-Q101	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5mins	8572 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1,000 cyc	0/77
H3TRB	JESD22-A101	Temp = 85C, RH=85%, bias = 80% of rated V or 100V max	1008hrs	0/77
UHASt	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96hr	0/77
RSH	JESD22-B106	Ta=265C 10 sec dwell, electrical test before and after	10s	0/77
SD	J-STD-002	Ta=245C 5 sec dwell	10s	0/77
Tri-Temp		Characterization of all 48A parameters		0/30
Thermal resistance	JESD24-3, 24-4, 24-6 as appropriate	Measure TR to assure specification compliance and provide process change comparison data.		0/10
PD		Per Case Outline		0/30
BPS	MIL-STD883 Method 2011	Per ass'y spec		0/10
BS	AEC-Q101-003	Per ass'y spec		0/10
DSS	MIL-STD883 Method 2019	Per ass'y spec		0/10



デバイス名: FQP13N50

RMS : U57532

パッケージ: TO220

テスト	仕様	条件	間隔	結果
HTRB	JESD22-A108	Tj = max rate Tj for 1,008 hours, 80% BV	1,008 hrs	0/77
HTGB	JESD22-A108	Ti= Maximum rated junction temperature, Vgss Bias = 100% of max rated	1,008 hrs	0/77
HTSL	JESD22-A103	Ta = Max rate storage temp for device	1,008 hrs	0/77
IOL	MIL-STD-750, M1037 AEC-Q101	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5mins	8572 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1,000 cyc	0/77
H3TRB	JESD22-A101	Temp = 85C, RH=85%, bias = 80% of rated V or 100V max	1008hrs	0/77
UHAST	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96hr	0/77
RSH	JESD22-B106	Ta=265C 10 sec dwell, electrical test before and after	10s	0/77
SD	J-STD-002	Ta=245C 5 sec dwell	10s	0/77
Tri-Temp		Characterization of all 48A parameters		0/30
Thermal resistance	JESD24-3, 24-4, 24-6 as appropriate	Measure TR to assure specification compliance and provide process change comparison data.		0/10
PD		Per Case Outline		0/30
BPS	MIL- STD883 Method 2011	Per ass'y spec		0/10
BS	AEC-Q101-003	Per ass'y spec		0/10
DSS	MIL-STD883 Method 2019	Per ass'y spec		0/10

デバイス名 : FDP047N10

RMS : V57533/V62042

パッケージ : TO220

テスト	仕様	条件	間隔	結果
HTRB	JESD22-A108	Tj = max rate Tj for 1,008 hours, 80% BV	1,008 hrs	0/77
HTGB	JESD22-A108	Ti= Maximum rated junction temperature, Vgss Bias = 100% of max rated	1,008 hrs	0/77
HTSL	JESD22-A103	Ta = Max rate storage temp for device	1,008 hrs	0/77
IOL	MIL-STD-750, M1037 AEC-Q101	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5mins	8572 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1,000 cyc	0/77
H3TRB	JESD22-A101	Temp = 85C, RH=85%, bias = 80% of rated V or 100V max	1008hrs	0/77
UHAST	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96hr	0/77
RSH	JESD22-B106	Ta=265C 10 sec dwell, electrical test before and after	10s	0/77
SD	J-STD-002	Ta=245C 5 sec dwell	10s	0/77
Tri-Temp		Characterization of all 48A parameters		0/30
Thermal resistance	JESD24-3, 24-4, 24-6 as appropriate	Measure TR to assure specification compliance and provide process change comparison data.		0/10
PD		Per Case Outline		0/30
BPS	MIL- STD883 Method 2011	Per ass'y spec		0/10
BS	AEC-Q101-003	Per ass'y spec		0/10



DSS	MIL-STD883 Method 2019	Per ass'y spec		0/10
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デバイス名: FCP36N60N

RMS : V57534/V62043

パッケージ: TO220

テスト	仕様	条件	間隔	結果
HTRB	JESD22-A108	Tj = max rate Tj for 1,008 hours, 80% BV	1,008 hrs	0/77
HTGB	JESD22-A108	Ti= Maximum rated junction temperature, Vgss Bias = 100% of max rated	1,008 hrs	0/77
HTSL	JESD22-A103	Ta = Max rate storage temp for device	1,008 hrs	0/77
IOL	MIL-STD-750, M1037 AEC-Q101	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5mins	8572 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1,000 cyc	0/77
H3TRB	JESD22-A101	Temp = 85C, RH=85%, bias = 80% of rated V or 100V max	1008hrs	0/77
UHAST	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96hr	0/77
RSH	JESD22-B106	Ta=265C 10 sec dwell, electrical test before and after	10s	0/77
SD	J-STD-002	Ta=245C 5 sec dwell	10s	0/77
Tri-Temp		Characterization of all 48A parameters		0/30
Thermal resistance	JESD24-3, 24-4, 24-6 as appropriate	Measure TR to assure specification compliance and provide process change comparison data.		0/10
PD		Per Case Outline		0/30
BPS	MIL-STD883 Method 2011	Per ass'y spec		0/10
BS	AEC-Q101-003	Per ass'y spec		0/10
DSS	MIL-STD883 Method 2019	Per ass'y spec		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
FDP032N08	FDP047N10
FDP054N10	FDP047N10
FDP023N08B-F102	FDP047N10
FCP36N60N	FCP36N60N
FQP12P20	FQP12P20
FQP11P06	FQP12P20
FQP12P10	FQP12P20
FQP15P12	FQP12P20



FQP17P06	FQP12P20
FQP17P10	FQP12P20
FQP2P40-F080	FQP12P20
FQP3P20	FQP12P20
FQP3P50	FQP12P20
FQP47P06	FQP12P20
FQP4P40	FQP12P20
FQP7P06	FQP12P20
FQP8P10	FQP12P20
FQP9P25	FQP12P20
FQP13N50	FQP13N50
FQP13N10	FQP13N50
FQP14N30	FQP13N50
FQP16N25	FQP13N50
FQP17N40	FQP13N50
FQP19N20	FQP13N50
FQP19N20-T	FQP13N50
FQP20N06	FQP13N50
FQP20N06L	FQP13N50
FQP22N30	FQP13N50
FQP27N25	FQP13N50
FQP2N40-F080	FQP13N50
FQP2N90	FQP13N50
FQP30N06	FQP13N50
FQP30N06L	FQP13N50
FQP34N20	FQP13N50
FQP3N30	FQP13N50
FQP44N10	FQP13N50
FQP4N20L	FQP13N50
SFP9530	FDP22N50N
IRL640A	FDP22N50N
IRF634B-FP001	FDP22N50N
IRF530A	FDP22N50N
FQP9N90C	FDP22N50N
FQP8N90C	FDP22N50N
FQP8N80C	FDP22N50N



最終製品 / プロセス変更通知

文書番号# : FPCN22761X

発行日: 03 Jan 2020

FQP6N90C	FDP22N50N
FQP6N60C	FDP22N50N
FQP6N40C	FDP22N50N
FQP4N90C	FDP22N50N
FQP3N80C	FDP22N50N
FQP3N50C-F080	FDP22N50N
FQP32N20C	FDP22N50N
FQP16N25C-F105	FDP22N50N
FQP12N60C	FDP22N50N
FQP10N20C	FDP22N50N
FDP26N40	FDP22N50N
FDP24N40	FDP22N50N
FDP20N50F	FDP22N50N
FDP20N50	FDP22N50N
FDP18N50	FDP22N50N
FDP18N20F	FDP22N50N
FDP22N50N	FDP22N50N
FQP9N30	FQP13N50
FQP85N06	FQP13N50
FQP7N20	FQP13N50
FQP65N06	FQP13N50
FQP55N10	FQP13N50
FQP50N06L	FQP13N50
FQP4N80	FQP13N50
FDP047N10	FDP047N10
FDP032N08-F102	FDP047N10
FDP025N06	FDP047N10
FDP030N06	FDP047N10



Appendix A: Changed Products

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
FDP023N08B-F102		FDP047N10		
FQP3P50		FQP12P20		
FQP47P06		FQP12P20		
FQP19N20		FQP13N50		
FDP025N06		FDP047N10		
FDP030N06		FDP047N10		
FDP032N08		FDP047N10		
FDP054N10		FDP047N10		
FCP36N60N		FCP36N60N		
FQP12P20		FQP12P20		
FQP12P10		FQP12P20		
FQP15P12		FQP12P20		
FQP17P06		FQP12P20		
FQP2P40-F080		FQP12P20		
FQP3P20		FQP12P20		
FQP7P06		FQP12P20		
FQP8P10		FQP12P20		
FQP17N40		FQP13N50		
FQP20N06		FQP13N50		
IRL640A		FDP22N50N		
IRF530A		FDP22N50N		
FQP9N90C		FDP22N50N		
FQP8N80C		FDP22N50N		
FQP6N90C		FDP22N50N		
FQP6N40C		FDP22N50N		
FQP4N90C		FDP22N50N		
FQP3N80C		FDP22N50N		
FDP047N10		FDP047N10		
FQP17P10		FQP12P20		
FQP4P40		FQP12P20		
FQP13N10		FQP13N50		
FQP11P06		FQP12P20		
FQP9P25		FQP12P20		
FQP13N50		FQP13N50		
FQP14N30		FQP13N50		
FQP16N25		FQP13N50		
FQP6N60C		FDP22N50N		
FQP3N50C-F080		FDP22N50N		
FQP32N20C		FDP22N50N		
FQP12N60C		FDP22N50N		
FQP10N20C		FDP22N50N		
FDP26N40		FDP22N50N		



Appendix A: Changed Products

DIKG : DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
FDP24N40		FDP22N50N		
FQP20N06L		FQP13N50		
FQP22N30		FQP13N50		
FQP27N25		FQP13N50		
FQP2N40-F080		FQP13N50		
FQP2N90		FQP13N50		
FQP30N06		FQP13N50		
FQP30N06L		FQP13N50		
FQP34N20		FQP13N50		
FQP3N30		FQP13N50		
FQP44N10		FQP13N50		
FQP4N20L		FQP13N50		
FDP20N50F		FDP22N50N		
FDP20N50		FDP22N50N		
FDP18N50		FDP22N50N		
FDP18N20F		FDP22N50N		
FDP22N50N		FDP22N50N		
FQP9N30		FQP13N50		
FQP85N06		FQP13N50		
FQP7N20		FQP13N50		
FQP65N06		FQP13N50		
FQP55N10		FQP13N50		
FQP50N06L		FQP13N50		
FQP4N80		FQP13N50		