ON Semiconductor®

Final Product/Process Change Notification

Document #:FPCN22769XA
Issue Date:02 Apr 2020

Title of Change:	Add Sumitomo mold compound E500 LL for SOT-23 industrial part
Proposed First Ship date:	10 Aug 2020 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or Jim.Peng@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 ffvf9f@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:	Assembly Lot Number
Change Category:	Assembly Change
Change Sub-Category(s):	Material Change

Sites Affected:

ON Semiconductor Sites	**External Foundry/Subcon Sites**
Leshan Phoenix Semiconductor, China	None

Description and Purpose:

Upon the expiration of this PCN, these devices will be built with 3 mold compounds at the same site. Datasheet specifications and product electrical performance remain unchanged. Reliability qualification and full electrical characterization over temperature had been performed.

The purpose of this change is to add new mold compound as second source.

There is no part number and product marking change as a result of this change.

Material to be change	Before Change Description	After Change Description
Mold Compound	Henkel GR640 HV Hitachi GE200 FHWG	Henkel GR640 HV Hitachi GE200 FHWG Sumitomo E500 LL

Reliability Data Summary:

Qual Vehicle Device: MMBT3904LT1G
RMS: 48073
Package: SOT-23

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj= max, V=100% rated V	1008 hrs	0/231
HTSL	JEDS22- A103	Temp.=150°C,no bias	1008 hrs	0/231
PC	JESD22-A113	MSL 1 @ 260 °C	Before H3TRB, TC, UHAST, HAST, AC, IOL	0/924
HAST	JESD22-A110	130C/85%RH, 80% rated V or 100V max	96 hrs	0/231
TC	JESD22-A104	Ta= - 65°C to +150°C	1000 cyc	0/231
UHAST	JESD22-A118	Ta=130C, 85% RH, no bias	96 hrs	0/231
IOL	MIL-STD-750	Ta=+25°C, delta Tj=100°C, On/off = 2 min	15000 cycs	0/231
RSH	JESD22-B106	Ta = 265C, 10 sec	-	0/30

Qual Vehicle Device: BAS21LT1G
RMS: 48079
Package: SOT-23

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj= max, V=100% rated V, 1008 Hrs	1008hrs	0/231

Qual Vehicle Device: MMBTA42LT1G
RMS: 58272
Package: SOT-23

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj= max, V=100% rated V, 1008 Hrs	1008hrs	0/231

Qual Vehicle Device: MMBT6520LT1G
RMS: 48071/58269
Package: SOT-23

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj= max, V=100% rated V, 1008 Hrs	1008hrs	0/231
PC	JESD22-A113	MSL 1 @ 260 °C	Before IOL	0/231
IOL	MIL-STD-750	Ta=+25°C, delta Tj=100°C, On/off = 2 min	15000 cycs	0/231

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
BAL99LT1G	BAS21LT1G
BAS116LT1G	BAS21LT1G
BAS116LT3G	BAS21LT1G
BAS16LT1G	BAS21LT1G
BAS16LT3G	BAS21LT1G
BAS19LT1G	BAS21LT1G
BAS19LT3G	BAS21LT1G
BAS20LT1G	BAS21LT1G
BAS20LT3G	BAS21LT1G
BAS21LT1G	BAS21LT1G
BAS21LT3G	BAS21LT1G
BAS21SLT1G	BAS21LT1G
BAS40-04LT1G	BAS21LT1G
BAS40-06LT1G	BAS21LT1G
BAS40LT1G	BAS21LT1G
BAS40LT3G	BAS21LT1G
BAS70-04LT1G	BAS21LT1G
BAS70LT1G	BAS21LT1G
BAT54ALT1G	BAS21LT1G
BAT54CLT1G	BAS21LT1G
BAT54CLT3G	BAS21LT1G
BAT54LT1G	BAS21LT1G
BAT54LT3G	BAS21LT1G
BAT54SLT1G	BAS21LT1G
BAV199LT1G	BAS21LT1G
BAV23CLT1G	BAS21LT1G
BAV23CLT3G	BAS21LT1G
BAV74LT1G	BAS21LT1G
BC807-16LT1G	MMBT6520LT1G

BC807-16LT3G	MMBT6520LT1G
BC807-25LT1G	MMBT6520LT1G
BC807-25LT3G	MMBT6520LT1G
BC807-40LT1G	MMBT6520LT1G
BC807-40LT3G	MMBT6520LT1G
BC808-25LT1G	MMBT6520LT1G
BC817-16LT1G	MMBTA42LT1G
BC817-16LT3G	MMBTA42LT1G
BC817-25LT1G	MMBTA42LT1G
BC817-25LT3G	MMBTA42LT1G
BC817-40LT1G	MMBTA42LT1G
BC817-40LT3G	MMBTA42LT1G
BC818-40LT1G	MMBTA42LT1G
BC846BLT1G	MMBTA42LT1G
BC846BLT3G	MMBTA42LT1G
BC847BLT1G	MMBTA42LT1G
BC847BLT3G	MMBTA42LT1G
BC847CLT1G	MMBTA42LT1G
BC847CLT3G	MMBTA42LT1G
BC848ALT1G	MMBTA42LT1G
BC848BLT1G	MMBTA42LT1G
BC848BLT3G	MMBTA42LT1G
BC848CLT1G	MMBTA42LT1G
BC849BLT1G	MMBTA42LT1G
BC849CLT1G	MMBTA42LT1G
BC850BLT1G	MMBTA42LT1G
BC850CLT1G	MMBTA42LT1G
BC856ALT1G	MMBT6520LT1G
BC856BLT1G	MMBT6520LT1G
BC856BLT3G	MMBT6520LT1G
BC857ALT1G	MMBT6520LT1G
BC857BLT1G	MMBT6520LT1G
BC857BLT3G	MMBT6520LT1G
BC857CLT1G	MMBT6520LT1G

BC857CLT3G	MMBT6520LT1G
BC858ALT1G	MMBT6520LT1G
BC858BLT1G	MMBT6520LT1G
BC858BLT3G	MMBT6520LT1G
BC858CLT1G	MMBT6520LT1G
BC858CLT3G	MMBT6520LT1G
BCW30LT1G	MMBT6520LT1G
BCW32LT1G	MMBTA42LT1G
BCW33LT1G	MMBTA42LT1G
BCW33LT3G	MMBTA42LT1G
BCW65ALT1G	MMBTA42LT1G
BCW65CLT1G	MMBTA42LT1G
BCW66GLT1G	MMBTA42LT1G
BCW66GLT3G	MMBT6520LT1G
BCW68GLT1G	MMBT6520LT1G
BCW68GLT3G	MMBT6520LT1G
BCW70LT1G	MMBT6520LT1G
BCW72LT1G	MMBTA42LT1G
BCX17LT1G	MMBT6520LT1G
BCX19LT1G	MMBTA42LT1G
BSS64LT1G	MMBTA42LT1G
BSV52LT1G	MMBTA42LT1G
MMBD101LT1G	BAS21LT1G
MMBD2836LT1G	BAS21LT1G
MMBD2838LT1G	BAS21LT1G
MMBD301LT1G	BAS21LT1G
MMBD301LT3G	BAS21LT1G
MMBD352LT1G	BAS21LT1G
MMBD353LT1G	BAS21LT1G
MMBD354LT1G	BAS21LT1G
MMBD355LT1G	BAS21LT1G
MMBD452LT1G	BAS21LT1G
MMBD6050LT1G	BAS21LT1G
MMBD6050LT3G	BAS21LT1G

MMBD6100LT1G	BAS21LT1G
MMBD7000LT1G	BAS21LT1G
MMBD7000LT3G	BAS21LT1G
MMBD701LT1G	BAS21LT1G
MMBT2222LT1G	MMBTA42LT1G
MMBT2369LT1G	MMBTA42LT1G
MMBT2369LT3G	MMBTA42LT1G
MMBT2484LT1G	MMBTA42LT1G
MMBT2484LT3G	MMBTA42LT1G
MMBT3416LT3G	MMBTA42LT1G
MMBT4124LT1G	MMBTA42LT1G
MMBT4126LT1G	MMBT6520LT1G
MMBT4126LT3G	MMBT6520LT1G
MMBT5087LT1G	MMBT6520LT1G
MMBT5087LT3G	MMBT6520LT1G
MMBT5088LT1G	MMBTA42LT1G
MMBT5089LT1G	MMBTA42LT1G
MMBT5401LT1G	MMBT6520LT1G
MMBT5401LT3G	MMBT6520LT1G
MMBT5550LT1G	MMBTA42LT1G
MMBT5550LT3G	MMBTA42LT1G
MMBT5551LT1G	MMBTA42LT1G
MMBT5551LT3G	MMBTA42LT1G
MMBT6427LT1G	MMBTA42LT1G
MMBT6428LT1G	MMBTA42LT1G
MMBT6429LT1G	MMBTA42LT1G
MMBT6520LT1G	MMBT6520LT1G
MMBT6521LT1G	MMBTA42LT1G
MMBT8099LT1G	MMBTA42LT1G
MMBT918LT1G	MMBTA42LT1G
MMBTA05LT1G	MMBTA42LT1G
MMBTA05LT3G	MMBTA42LT1G
MMBTA06LT1G	MMBTA42LT1G
MMBTA06LT3G	MMBTA42LT1G

MMBTA13LT1G	MMBTA42LT1G
MMBTA13LT3G	MMBTA42LT1G
MMBTA14LT1G	MMBTA42LT1G
MMBTA55LT1G	MMBT6520LT1G
MMBTA56LT1G	MMBT6520LT1G
MMBTA56LT1G-HFE	MMBT6520LT1G
MMBTA56LT3G	MMBT6520LT1G
MMBTA63LT1G	MMBT6520LT1G
MMBTA64LT1G	MMBT6520LT1G
MMBTA64LT3G	MMBT6520LT1G
MMBTH10-4LT1G	MMBTA42LT1G
MMBTH10LT1G	MMBTA42LT1G
MMBTH10LT3G	MMBTA42LT1G
MMUN2111LT1G	MMBT6520LT1G
MMUN2111LT3G	MMBT6520LT1G
MMUN2112LT1G	MMBT6520LT1G
MMUN2113LT1G	MMBT6520LT1G
MMUN2113LT3G	MMBT6520LT1G
MMUN2114LT1G	MMBT6520LT1G
MMUN2114LT3G	MMBT6520LT1G
MMUN2115LT1G	MMBT6520LT1G
MMUN2116LT1G	MMBT6520LT1G
MMUN2130LT1G	MMBT6520LT1G
MMUN2131LT1G	MMBT6520LT1G
MMUN2132LT1G	MMBT6520LT1G
MMUN2133LT1G	MMBT6520LT1G
MMUN2134LT1G	MMBT6520LT1G
MMUN2135LT1G	MMBT6520LT1G
MMUN2136LT1G	MMBT6520LT1G
MMUN2137LT1G	MMBT6520LT1G
MMUN2138LT1G	MMBT6520LT1G
MMUN2140LT1G	MMBT6520LT1G
MMUN2141LT1G	MMBT6520LT1G
MMUN2211LT1G	MMBTA42LT1G

MMUN2211LT3G	MMBTA42LT1G
MMUN2212LT1G	MMBTA42LT1G
MMUN2213LT1G	MMBTA42LT1G
MMUN2214LT1G	MMBTA42LT1G
MMUN2215LT1G	MMBTA42LT1G
MMUN2216LT1G	MMBTA42LT1G
MMUN2217LT1G	MMBTA42LT1G
MMUN2218LT1G	MMBTA42LT1G
MMUN2230LT1G	MMBTA42LT1G
MMUN2231LT1G	MMBTA42LT1G
MMUN2232LT1G	MMBTA42LT1G
MMUN2233LT1G	MMBTA42LT1G
MMUN2234LT1G	MMBTA42LT1G
MMUN2235LT1G	MMBTA42LT1G
MMUN2236LT1G	MMBTA42LT1G
MMUN2237LT1G	MMBTA42LT1G
MMUN2238LT1G	MMBTA42LT1G
MMUN2240LT1G	MMBTA42LT1G
MMUN2241LT1G	MMBTA42LT1G
NSD070ALT1G	BAS21LT1G

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.

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最終製品 / プロセス変更通知

文書番号#：FPCN22769XA
発行日:02 Apr 2020

変更件名:	SOT−23 産業用製品の代替モールドコンパウンドとして住友製 E500 LL の追加
初回出荷予定日:	10 Aug 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 Jim.Peng@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 ffvf9f@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:	組立ロット番号

変更カテゴリ:組立の変更

変更サブカテゴリ: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**:
Leshan Phoenix Semiconductor, China	無し

説明および目的:

本 PCN の期限切れに伴い、対象製品は同製造拠点で3種類のモールドコンパウンドにて製造されるようになります。データシート規格および製品の電気的性能に変更はありません。信頼性認定試験および全ての電気的温度特性評価は実施済みです。

この変更の目的は、セカンドソースとして新しいモールドコンパウンドを追加する事です。

この変更の結果として、製品名や製品マーキングに変更はありません。

変更される材料	変更前の表記	変更後の表記
モールド・コンパウンド	Henkel GR640 HV Hitachi GE200 FHWG	Henkel GR640 HV Hitachi GE200FHWG Sumitomo E500 LL

信頼性データの要約:

デバイス名: MMBT3904LT1G
RMS: 48073
パッケージ :SOT-23

テスト	仕様	条件	間隔	結果
HTRB	JESD22-A108	Tj= max, V=100% rated V	1008 hrs	0/231
HTSL	JEDS22- A103	Temp.=150°C,no bias	1008 hrs	0/231
PC	JESD22-A113	MSL 1 @ 260 °C	Before H3TRB, TC, UHAST, HAST, AC, IOL	0/924
HAST	JESD22-A110	130C/85%RH, 80% rated V or 100V max	96 hrs	0/231
TC	JESD22-A104	Ta= - 65°C to +150°C	1000 cyc	0/231
UHAST	JESD22-A118	Ta=130C, 85% RH, no bias	96 hrs	0/231
IOL	MIL-STD-750	Ta=+25°C, delta Tj=100°C, On/off = 2 min	15000 cycs	0/231
RSH	JESD22-B106	Ta = 265C, 10 sec	-	0/30

デバイス名: BAS21LT1G
RMS: 48079
パッケージ :SOT-23

テスト	仕様	条件	間隔	結果
HTRB	JESD22-A108	Tj= max, V=100% rated V, 1008 Hrs	1008hrs	0/231

デバイス名: MMBTA42LT1G
RMS: 58272
パッケージ :SOT-23

テスト	仕様	条件	間隔	結果
HTRB	JESD22-A108	Tj= max, V=100% rated V, 1008 Hrs	1008hrs	0/231

デバイス名: MMBT6520LT1G
RMS: 48071/58269
パッケージ :SOT-23

テスト	仕様	条件	間隔	結果
HTRB	JESD22-A108	Tj= max, V=100% rated V, 1008 Hrs	1008hrs	0/231
PC	JESD22-A113	MSL 1 @ 260 °C	Before IOL	0/231
IOL	MIL-STD-750	Ta=+25°C, delta Tj=100°C, On/off = 2 min	15000 cycs	0/231

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	認定試験用ビークル
BAL99LT1G	BAS21LT1G
BAS116LT1G	BAS21LT1G
BAS116LT3G	BAS21LT1G
BAS16LT1G	BAS21LT1G
BAS16LT3G	BAS21LT1G
BAS19LT1G	BAS21LT1G
BAS19LT3G	BAS21LT1G
BAS20LT1G	BAS21LT1G
BAS20LT3G	BAS21LT1G
BAS21LT1G	BAS21LT1G
BAS21LT3G	BAS21LT1G
BAS21SLT1G	BAS21LT1G
BAS40-04LT1G	BAS21LT1G
BAS40-06LT1G	BAS21LT1G
BAS40LT1G	BAS21LT1G
BAS40LT3G	BAS21LT1G
BAS70-04LT1G	BAS21LT1G
BAS70LT1G	BAS21LT1G
BAT54ALT1G	BAS21LT1G
BAT54CLT1G	BAS21LT1G
BAT54CLT3G	BAS21LT1G
BAT54LT1G	BAS21LT1G
BAT54LT3G	BAS21LT1G
BAT54SLT1G	BAS21LT1G
BAV199LT1G	BAS21LT1G
BAV23CLT1G	BAS21LT1G
BAV23CLT3G	BAS21LT1G
BAV74LT1G	BAS21LT1G
BC807-16LT1G	MMBT6520LT1G
BC807-16LT3G	MMBT6520LT1G
BC807-25LT1G	MMBT6520LT1G
BC807-25LT3G	MMBT6520LT1G

BC807-40LT1G	MMBT6520LT1G
BC807-40LT3G	MMBT6520LT1G
BC808-25LT1G	MMBT6520LT1G
BC817-16LT1G	MMBTA42LT1G
BC817-16LT3G	MMBTA42LT1G
BC817-25LT1G	MMBTA42LT1G
BC817-25LT3G	MMBTA42LT1G
BC817-40LT1G	MMBTA42LT1G
BC817-40LT3G	MMBTA42LT1G
BC818-40LT1G	MMBTA42LT1G
BC846BLT1G	MMBTA42LT1G
BC846BLT3G	MMBTA42LT1G
BC847BLT1G	MMBTA42LT1G
BC847BLT3G	MMBTA42LT1G
BC847CLT1G	MMBTA42LT1G
BC847CLT3G	MMBTA42LT1G
BC848ALT1G	MMBTA42LT1G
BC848BLT1G	MMBTA42LT1G
BC848BLT3G	MMBTA42LT1G
BC848CLT1G	MMBTA42LT1G
BC849BLT1G	MMBTA42LT1G
BC849CLT1G	MMBTA42LT1G
BC850BLT1G	MMBTA42LT1G
BC850CLT1G	MMBTA42LT1G
BC856ALT1G	MMBT6520LT1G
BC856BLT1G	MMBT6520LT1G
BC856BLT3G	MMBT6520LT1G
BC857ALT1G	MMBT6520LT1G
BC857BLT1G	MMBT6520LT1G
BC857BLT3G	MMBT6520LT1G
BC857CLT1G	MMBT6520LT1G
BC857CLT3G	MMBT6520LT1G
BC858ALT1G	MMBT6520LT1G
BC858BLT1G	MMBT6520LT1G
BC858BLT3G	MMBT6520LT1G
BC858CLT1G	MMBT6520LT1G

BC858CLT3G	MMBT6520LT1G
BCW30LT1G	MMBT6520LT1G
BCW32LT1G	MMBTA42LT1G
BCW33LT1G	MMBTA42LT1G
BCW33LT3G	MMBTA42LT1G
BCW65ALT1G	MMBTA42LT1G
BCW65CLT1G	MMBTA42LT1G
BCW66GLT1G	MMBTA42LT1G
BCW66GLT3G	MMBT6520LT1G
BCW68GLT1G	MMBT6520LT1G
BCW68GLT3G	MMBT6520LT1G
BCW70LT1G	MMBT6520LT1G
BCW72LT1G	MMBTA42LT1G
BCX17LT1G	MMBT6520LT1G
BCX19LT1G	MMBTA42LT1G
BSS64LT1G	MMBTA42LT1G
BSV52LT1G	MMBTA42LT1G
MMBD101LT1G	BAS21LT1G
MMBD2836LT1G	BAS21LT1G
MMBD2838LT1G	BAS21LT1G
MMBD301LT1G	BAS21LT1G
MMBD301LT3G	BAS21LT1G
MMBD352LT1G	BAS21LT1G
MMBD353LT1G	BAS21LT1G
MMBD354LT1G	BAS21LT1G
MMBD355LT1G	BAS21LT1G
MMBD452LT1G	BAS21LT1G
MMBD6050LT1G	BAS21LT1G
MMBD6050LT3G	BAS21LT1G
MMBD6100LT1G	BAS21LT1G
MMBD7000LT1G	BAS21LT1G
MMBD7000LT3G	BAS21LT1G
MMBD701LT1G	BAS21LT1G
MMBT2222LT1G	MMBTA42LT1G
MMBT2369LT1G	MMBTA42LT1G
MMBT2369LT3G	MMBTA42LT1G

MMBT2484LT1G	MMBTA42LT1G
MMBT2484LT3G	MMBTA42LT1G
MMBT3416LT3G	MMBTA42LT1G
MMBT4124LT1G	MMBTA42LT1G
MMBT4126LT1G	MMBT6520LT1G
MMBT4126LT3G	MMBT6520LT1G
MMBT5087LT1G	MMBT6520LT1G
MMBT5087LT3G	MMBT6520LT1G
MMBT5088LT1G	MMBTA42LT1G
MMBT5089LT1G	MMBTA42LT1G
MMBT5401LT1G	MMBT6520LT1G
MMBT5401LT3G	MMBT6520LT1G
MMBT5550LT1G	MMBTA42LT1G
MMBT5550LT3G	MMBTA42LT1G
MMBT5551LT1G	MMBTA42LT1G
MMBT5551LT3G	MMBTA42LT1G
MMBT6427LT1G	MMBTA42LT1G
MMBT6428LT1G	MMBTA42LT1G
MMBT6429LT1G	MMBTA42LT1G
MMBT6520LT1G	MMBT6520LT1G
MMBT6521LT1G	MMBTA42LT1G
MMBT8099LT1G	MMBTA42LT1G
MMBT918LT1G	MMBTA42LT1G
MMBTA05LT1G	MMBTA42LT1G
MMBTA05LT3G	MMBTA42LT1G
MMBTA06LT1G	MMBTA42LT1G
MMBTA06LT3G	MMBTA42LT1G
MMBTA13LT1G	MMBTA42LT1G
MMBTA13LT3G	MMBTA42LT1G
MMBTA14LT1G	MMBTA42LT1G
MMBTA55LT1G	MMBT6520LT1G
MMBTA56LT1G	MMBT6520LT1G
MMBTA56LT1G-HFE	MMBT6520LT1G
MMBTA56LT3G	MMBT6520LT1G
MMBTA63LT1G	MMBT6520LT1G
MMBTA64LT1G	MMBT6520LT1G

MMBTA64LT3G	MMBT6520LT1G
MMBTH10-4LT1G	MMBTA42LT1G
MMBTH10LT1G	MMBTA42LT1G
MMBTH10LT3G	MMBTA42LT1G
MMUN2111LT1G	MMBT6520LT1G
MMUN2111LT3G	MMBT6520LT1G
MMUN2112LT1G	MMBT6520LT1G
MMUN2113LT1G	MMBT6520LT1G
MMUN2113LT3G	MMBT6520LT1G
MMUN2114LT1G	MMBT6520LT1G
MMUN2114LT3G	MMBT6520LT1G
MMUN2115LT1G	MMBT6520LT1G
MMUN2116LT1G	MMBT6520LT1G
MMUN2130LT1G	MMBT6520LT1G
MMUN2131LT1G	MMBT6520LT1G
MMUN2132LT1G	MMBT6520LT1G
MMUN2133LT1G	MMBT6520LT1G
MMUN2134LT1G	MMBT6520LT1G
MMUN2135LT1G	MMBT6520LT1G
MMUN2136LT1G	MMBT6520LT1G
MMUN2137LT1G	MMBT6520LT1G
MMUN2138LT1G	MMBT6520LT1G
MMUN2140LT1G	MMBT6520LT1G
MMUN2141LT1G	MMBT6520LT1G
MMUN2211LT1G	MMBTA42LT1G
MMUN2211LT3G	MMBTA42LT1G
MMUN2212LT1G	MMBTA42LT1G
MMUN2213LT1G	MMBTA42LT1G
MMUN2214LT1G	MMBTA42LT1G
MMUN2215LT1G	MMBTA42LT1G
MMUN2216LT1G	MMBTA42LT1G
MMUN2217LT1G	MMBTA42LT1G
MMUN2218LT1G	MMBTA42LT1G
MMUN2230LT1G	MMBTA42LT1G
MMUN2231LT1G	MMBTA42LT1G
MMUN2232LT1G	MMBTA42LT1G

MMUN2233LT1G	MMBTA42LT1G
MMUN2234LT1G	MMBTA42LT1G
MMUN2235LT1G	MMBTA42LT1G
MMUN2236LT1G	MMBTA42LT1G
MMUN2237LT1G	MMBTA42LT1G
MMUN2238LT1G	MMBTA42LT1G
MMUN2240LT1G	MMBTA42LT1G
MMUN2241LT1G	MMBTA42LT1G
NSD070ALT1G	BAS21LT1G