



友順科技股份有限公司

UNISONIC TECHNOLOGIES CO., LTD

產品變更通知  
PRODUCT CHANGE NOTIFICATION

PCN No.	IC-PPCN-160501	Issue Date	25 <sup>th</sup> -May-2016
TITLE	1NXX/2NXX/3NXX 鋁線線徑變更 (Al wire diameter change on 1NXX/2NXX/3NXX series devices)		Page 1 of 3

**變更主旨(TITLE):**

本公司部份MOSFET產品之Source端使用之封裝鋁線線徑放大變更。  
Conversion of Aluminum wire change to bigger diameter Aluminum wire on Source-Pad bonding of selected UTC's MOSFET products.

**變更類別(CATEGORY):**

Design       Process       Raw Material       Manufacturing Site  
 Testing       Packing/Shipping/Labeling       Other Al wire diameter

**變更說明(DESCRIPTION OF CHANGE):**

友順公司謹此通知我們的客戶，本公司已獲 貴公司承認及交貨之部份MOSFET產品，其封裝製程在Source端所使用之鋁線材料將視該產品設計與封裝形式，陸續計畫將Source端使用之鋁線線徑放大，影響之產品明細請參本通知書**影響產品**內容。

UTC is notifying customers that Aluminum Bonding Wire plan to replace of bigger diameter Aluminum Bonding Wire on the Source-Pad used by listed products, please refer to **APPLICABLE PRODUCTS** section in this PCN.

變更前鋁線線徑 : 5 mil or 6 mil      變更後鋁線線徑 : 8 mil

Before change : 5 mil or 6 mil size diameter      After change : 8 mil size diameter

此次變更內容，主要與封裝產線機台設定與產能有關，而與產品可靠性無關。

The major concern of this change is related to wire bonding tool setting and throughput issue of package house, not relate to reliability issue of products.

且使用較大線徑鋁線取代現有線徑鋁線，可進一步提高產品可靠性：

The advantage of compared to smaller size bonding wire, bigger size wire is benefit in reliability.

- 較大線徑的用線，線阻降低，對MOSFET產品的Rdson特性有利，且熱量產生減少。  
Bigger size wire will with lower electrical resistance, which is good in Rdson characteristic of MOSFET products and also reduce thermal generating.

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### 品質驗證(QUALIFICATION AND RELIABILITY DATA):

本項變更之所有產品封裝別，均經取樣進行完整之特性及可靠性驗證，品質均符合規格書要求。Reliability qualification and full electrical characterization have been performed by was completed using representative devices, the proposed change is guaranteed to meet the parameters and limits specified in the current UTC's data sheet. Characterization data is available upon request.

### 變更識別(IDENTIFICATION METHOD TO DISTINGUISH CHANGE)

使用大線徑之產品採用個別外包訂單管理，並以D/C(THXX之後)及製造工令來進行批次管控及追溯，自即日起接受樣品索取及產品訂購，現有庫存品仍會繼續出貨，實際交貨依客戶之要求，但同批出貨採單一規格，禁止混裝。

The product using bigger diameter is going to be controlled by Production Order and the delivered product can be tracing by D/C(after and include THXX) and Work Order number. Samples of parts and order are available upon request. Currently both of original and bigger diameter products will be delivered for the time being. And one shipment one wire type only to be allowed.

### 生效日期(EFFECTIVE DATE OF CHNAGE):

26<sup>th</sup>-Aug-2016

為維護貴我權益，請在收到通知30日內回覆貴司意見，以利變更順利執行。若未蒙貴司回覆，將依照通知函內容登錄之起始時間執行此項變更

UTC will consider this change approved unless specific requests are addressed in writing within 30 days of receipt of this PCN.

### 適用範圍(APPLICABLE PRODUCTS):

#### - 1N / 2N / 3N MOSFET

MOSFET of 1Nxx	MOSFET of 2Nxx	MOSFET of 3Nxx
1N60	2N60	3N40K-MK
1N60-B	2N60-B	3N50
1N65	2N60-C	3N60
1N70	2N60-CB	3N60K-MT
	2N60-E	3N65
	2N60-F	3N65A
	2N60K	3N70
	2N60K-MT	3N70MJ
	2N60K-TA	3N80
	2N60L	3N80Z
	2N60Z	3N90
	2N65	3N90-E

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	2N65	
	2N65-C	
	2N65-E	
	2N65K-MT	
	2N65L	

**影響封裝形式 (APPLICABLE PRODUCTS): - Package Type**

Package Type				
TO-220	TO-220F	TO-220F1		
TO-251	TO-251S	TO-251S2	TO-251S4	
TO-252				
TO-262				
TO-263				

友順對此變更所引起之不便表達致歉，如果對本變更有任何問題，請與我們的業務代表或經銷商聯絡。

We apologize for any inconvenience causing from this change, if you have any questions concerning this change, please contact your local sales or UTC's sales representative.