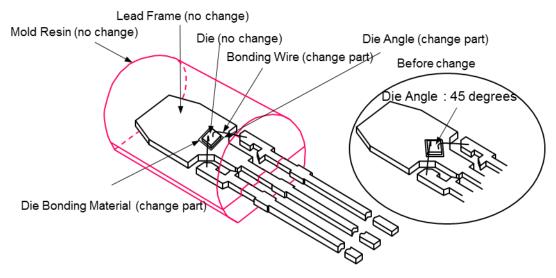
Date: Sep. 10, 2013

RENESAS TECHNICAL UPDATE

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Product Category	Transistor		Document No.	TN-TRS-A147A/E	Rev.	1.00
Title	Change of the die bonding material		Information Category	Change of packages		
Applicable Product	2SK1336,2SK1336-90TZ, 2SK1336-90TZ-E, 2SK1336-E,2SK1336TZ-E 2SD1922E90TZ,2SD1922E91TZ 2SK975-01TZ-E,2SK975-02TZ-E, 2SK975-90TZ,2SK975-E,2SK975-E-Q, 2SK975TZ,2SK975TZ-E,2SK975TZ-E-Q	Lot No.		Nothing		
		all	Reference Document			

- 1. Reason Deterioration of gold foil supply equipment.
- 2.Contents Please refer to the following Fig 1 and Table 1. It will use the Silver paste in the future though these are produced on the gold fail paste for the die bonding material now. And the die angle changes along with the change of this die bonding material.
- 3. Schedule We will start the changes from Oct. 2013 gradually. Delivery of new or current versions depends on stock.
- Remarks 1. After change, there is no change of the guarantee electrical characteristic and the reliability of each product.
 Renesas Electronics Corp. is responsible for the product quality as usual before.
 - 2. The Silver paste is applied for TO-92,TO-92MOD of other transistor since the past and there are a lot of production results. It applies to the above-mentioned products this time though it has already applied to a part of TO-92,TO-92MOD product.



(note) Figure is an example of 2SK975.

Fig1. Structure Drawing

Table 1. Content of change

Item	Current	After change	
Die Bonding Material	Gold foil	Silver paste	
Die Angle	45 degrees	0 degrees	