

# PRODUCT CHANGE NOTIFICATION



Reference: BED.PCN-6  
Title: 2N3904CSM / 2N3904DCSM Datasheet Amendment  
Issue Date: 01<sup>st</sup> February 2023  
Originator: TT Electronics – Welwyn Components Ltd  
Distribution: All Customers

## 1 Summary

This change notification is provided to inform the customers of the affected product of changes listed in the table below. The change is classified as minor. Minor is for customer information only. Customers may need to consider the impact of the change before orders can be processed in the future.

### 1.1 Affected products

2N3904CSM-QR-EBC : NPN Transistor, LCC1 Ceramic Package [Au lead finish].  
2N3904DCSM : NPN Dual Transistors, LCC2 Ceramic Package [Au lead finish].

## 2 Change Information

### 2.1 Detail of change

New issue for the 2N3904CSM & 2N3904DCSM product datasheets/specifications after sourcing an alternative die to make the devices. All future devices will be supplied in accordance with issue 2, 2N3904CSM (DOC 12302) or 2N3904DCSM (DOC 9009) datasheets/specifications.

Datasheet amendment has resulted in a minor change to dynamic 'transition frequency characteristic (fT)' of the device from: 300MHz (Min). to: 250MHz (Min), with a measured typical of : 300MHz (Typ).  
(Note: No other device parameters are affected by this change).

### 2.2 Reason for change

The previous die used to make the issue 1 of the 2N3904CSM & 2N3904DCSM devices became obsolete and therefore we have sourced a new die in order that both products may remain active.

### 2.3 Change impact

Overall change impact is considered low, as the measured device 'transition frequency (fT)' remains typically 300MHz, but could still impact customers who had a specific design requirement to the original 'transition frequency (fT)' specification, due to 300MHz (Min) limit.

### 2.4 Qualification of change

Change has been qualified by measurement in accordance with the issue 2 datasheets/specifications.

## 3 Implementation of change

### 3.1 Implementation date

All future orders / products shipped after 01/02/2023 would be in accordance with the issue 2 datasheet/specification.

## 4 Contact information

### Important information / Disclaimer

Welwyn Components Limited reserves the right to change test conditions, parameter limits and dimensions without notice. Information furnished by Welwyn is believed to be both accurate and reliable at the time of publication. However, Welwyn assumes no responsibility for any errors or omissions discovered in its use. Welwyn encourages customers to verify that product availability, information and datasheets are current before placing orders.

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To contact TT Electronics regarding this change please use the details at the foot of this document, or, contact your local sales representative.

## 5 Authorisation

	Name	Function	Date
Issued by:	Dave Watt	Development Engineer	01/02/2023
Approved by:	Paul Wallace	Product Line Engineering Manager (Discrete Products)	01/02/2023
Approved by:	Martyn Brock	Principal Quality Assurance Engineer	01/02/2023
Approved by:	Klaus Zwerschina	VP Sales. Sensors & Specialist Components	01/02/2023

## 6 Customer acknowledgement of receipt

	Name	Function	Date
Received by:			

Disclaimer applies from page 1

**TT Electronics**

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