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**UTE**

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**CECC 90 101-038**

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Nombre total de pages : 18  
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**COMPOSANTS ELECTRONIQUES SOUS ASSURANCE  
DE QUALITE CONFORMEMENT A :**

**ELECTRONIC COMPONENTS OF ASSESSED QUALITY  
IN ACCORDANCE WITH :**

GS : CECC 90 000 (NF C 86-020)

SS : CECC 90 100 (NF C 86-200)

FS : CECC 90 101 (NF C 86-213)

**UTE C 86-213/B 58**

Adoptée le 16 novembre 1987

BS9401 F1168 to F1180

Issue 1

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**DESSIN ET DIMENSIONS :  
OUTLINE AND DIMENSIONS :**

CEI 191-2 - Types 050 G 04 - 050 G 03  
IEC 191-2 - Types 050 G 04 - 050 G 03

Référence française : F 105 - F 105A  
French reference :

**IDENTIFICATION DES CONNEXIONS  
TERMINAL CONNECTIONS**

Voir Tableau II  
See Table II

**SPECIFICATION PARTICULIERE POUR  
MICROSTRUCTURES LOGIQUES SELON FS 90 101  
DETAIL SPECIFICATION FOR DIGITAL INTEGRA-  
TED CIRCUITS IN ACCORDANCE WITH FS 90 101**

**54/64/74 128**

**AMPLIFICATEUR DE LIGNE 75 Ω  
75 Ω LINE DRIVER**

**TECHNOLOGIE DE FABRICATION :  
TYPICAL CONSTRUCTION :**

Circuit monolithique bipolaire au silicium, boîtiers  
avec ou sans cavité.

*Silicon monolithic bipolar integrated circuit,  
cavity/non-cavity packages.*

**NIVEAUX D'ASSURANCE DE QUALITE : P, Y, L  
ASSESSMENT LEVELS :**

**AMENDMENTS TO THE FOLLOWING CLAUSES****§ 2 - Add :**

Most negative low level input voltage at an input current :  $I_{IKB} = -12 \text{ mA}$ ,  $V_{IKB} = -1,5 \text{ V}$

- Page 2,  $I_{IL}$  parameter : change limit from 4,6 mA to 1,6 mA

**§ 3 To be replaced by CECC 90 000/3 § 2.5****§ 4 To be deleted****§ 5 To be replaced by CECC 90 000/3 § 2.6****§ 6 To be replaced by CECC 90 000/3 § 4.10.1****§ 7 All inspection level and AQL are those specified in 90 100/3.**

Replace A3b by A4a, A3c by A4b, A4 by A5.

Add A8 of 90 100/3 (Assessment level P only).

Apply to A2 extreme temperature testing with A7a/A7b 90 000 inspection requirements.

For groups B, C, D, apply 90 100/3.

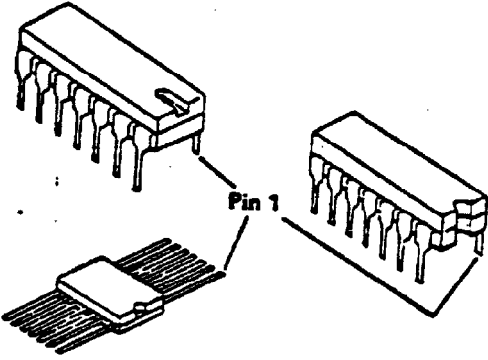
Sub-groups A6, A7 : not applicable.

Se reporter à la Liste des Produits Homologués CECC 00 200 en vigueur pour connaître les fabricants dont les composants conformes à cette spécification particulière sont homologués.

Information about manufacturers who have components qualified to this detail specification is available in the current CECC 00 200 : Qualified Products List.

**Documents**

Document Sharing Hub

|                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>BRITISH STANDARDS INSTITUTION<br/>2, PARK STREET, LONDON, W1A 2BS</p> <p>Specification available from:- As shown in PD 9002</p>                                                                                                                                                           | <p>BS9401 F1168 to F1180<br/>ISSUE 1<br/>JULY 1980</p> <p>Page 1 of 17 Pages</p>                                                                                                                                                                                                                                        |
| <p>ELECTRONIC COMPONENTS OF ASSESSED QUALITY<br/>DETAIL SPECIFICATION IN ACCORDANCE WITH<br/>BS 9400: 1970</p>                                                                                                                                                                               | <p>MANUFACTURER'S TYPE NUMBER<br/>54128<br/>64128<br/>74128</p> <p>SEE PD 9002</p>                                                                                                                                                                                                                                      |
| <p>Outline not to scale. Isometric projection.</p>  <p>For detail dimensions:<br/> 14 Lead Flatpack - See Appendix I<br/> 14 Lead Dual-in-line - BS 2934 SO-87B<br/> Marking information - See Clause 3</p> | <p>For ordering information<br/>see clause 5.</p> <p>SILICON MONOLITHIC TTL<br/>75 OHM LINE DRIVER</p> <p>(See clause 8)</p> <p>CERAMIC/GLASS HERMETICALLY<br/>SEALED ENCAPSULATION OR<br/>DUAL-IN-LINE PLASTIC<br/>ENCAPSULATION</p> <p>FULL ASSESSMENT LEVEL AND<br/>APPLICATION CATEGORIES<br/>S1, S2, S3 and S4</p> |

# 1. LIMITING CONDITIONS OF USE (not for inspection purposes)

Absolute values (non-simultaneous)

|           |                                                |                         |                         |
|-----------|------------------------------------------------|-------------------------|-------------------------|
| $V_{CC}$  | Maximum continuous positive supply voltage     | 7.0 V                   |                         |
|           | Maximum continuous negative supply voltage     | 0.5 V                   |                         |
| $V_{IN}$  | Maximum continuous positive input voltage      | 5.5V                    |                         |
|           | Maximum continuous negative input voltage      | 0.5 V                   |                         |
| $-V_{IN}$ | Maximum continuous negative input voltage      | 0.5 V                   |                         |
| $-I_{IN}$ | Maximum negative input current (clamping mode) | 12.0                    |                         |
| $T_{amb}$ | Ambient operating temperature range            | -55°C to +125°C         |                         |
|           |                                                | -40°C to + 85°C         |                         |
|           |                                                | 0°C to + 70°C           |                         |
| $T_{stg}$ | Storage temperature range                      | -55°C to +150°C         |                         |
|           |                                                | Shock (0.5 ms duration) | 14 700 m/s <sup>2</sup> |
|           |                                                | Vibration               | 196 m/s <sup>2</sup>    |

Refer to Qualified Products List PD 9002 for details of manufacturers approved to this specification

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RECOMMENDED CONDITIONS OF USE AND ASSOCIATED CHARACTERISTICS  
(Not for inspection purposes)

These characteristics apply over the ambient operating temperature range unless otherwise stated.

|             |                                                                                        | Min.        | Max.         | Unit     |
|-------------|----------------------------------------------------------------------------------------|-------------|--------------|----------|
| $V_{CC}$    | Positive supply voltage<br>54128<br>64128, 74128                                       | 4.5<br>4.75 | 5.5<br>5.25  | V<br>V   |
| $I_{CC}$    | Total supply current per package<br>at $V_{CC}$ maximum<br>Outputs High<br>Outputs Low | -<br>-      | 21.0<br>57.0 | mA<br>mA |
| $V_{IH}$    | HIGH state input voltage                                                               | 2.0         | 5.5          | V        |
| $V_{IL}$    | LOW state input voltage                                                                | -           | 0.8          | V        |
| $V_{OH}$    | HIGH state output voltage<br>at $-I_{OH} = I_{OH} \text{ max.}$                        | 2.0         | -            | V        |
| $V_{OL}$    | LOW state output voltage<br>$I_{OL} = I_{OL} \text{ max.}$                             | -           | 0.4          | V        |
| $I_{IH(1)}$ | HIGH state input current<br>$V_{IN} = V_{IH} \text{ max.}$                             | -           | 1.0          | mA       |
| $I_{IH(2)}$ | HIGH state input current<br>$V_{IN} = V_{OH} \text{ min.}$                             | -           | 40.0         | $\mu A$  |
| $-I_{IL}$   | LOW state input current<br>$V_{IN} = V_{OL} \text{ max.}$                              | -           | 4.6          | mA       |
| $-I_{OH}$   | HIGH state output current<br>54128<br>64128, 74128                                     | -           | 29.0<br>42.4 | mA       |
| $I_{OL}$    | LOW state output current                                                               | -           | 48.0         | mA       |
| $-I_{OS}$   | Output short circuit current                                                           | 70.0        | 180.0        | mA       |
| $-V_{IK}$   | Input Clamping Voltage                                                                 | -           | 1.5          | V        |

2.

RECOMMENDED CONDITIONS OF USE AND ASSOCIATED CHARACTERISTICS (Contd.)SWITCHING CHARACTERISTICS $V_{CC} = 5V$ ,  $T_{amb} = 25^{\circ}C$ ,  $C_L = 50\text{ pF}$ ,  $R_L = 133\Omega$ 

|                                                 | Min. | Max. | Unit |
|-------------------------------------------------|------|------|------|
| $t_{PHL}$ HIGH to LOW state propagation time    |      | 12.0 | ns   |
| $t_{PLH}$ LOW to HIGH state propagation time    |      | 9.0  | ns   |
| $t_{PHL}$ As above except $C_L = 150\text{ pF}$ |      | 18.0 | ns   |
| $t_{PLH}$ As above except $C_L = 150\text{ pF}$ |      | 15.0 | ns   |
|                                                 |      |      |      |
|                                                 |      |      |      |

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FUNCTION TABLE  
TABLE I

| INPUTS |   | OUTPUT |
|--------|---|--------|
| A      | B | Y      |
| H      | H | L      |
| H      | L | L      |
| L      | H | L      |
| L      | L | H      |

PIN CONNECTION DIAGRAM  
TABLE II

