

UTE

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CECC 90 101-010

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Nombre total de pages : 16
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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 30

Adoptée le 16 novembre 1987

BS9403 F091 to F103

Issue 1

July, 1977

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 INTEGRATED CIRCUITS IN ACCORDANCE WITH FS 90 101

54/64/74 14**CIRCUITS ET-NON TRIGGER DE SCHMITT*****HEX SCHMITT TRIGGER INVERTERS***

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 : $I_{IKB} = -12 \text{ mA}$, $V_{IKB} = -1,5 \text{ V}$

§ 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.

Page 7, $I_{IH(2)}$ parameter, replace max. limit 40 mA by 40 μA

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.

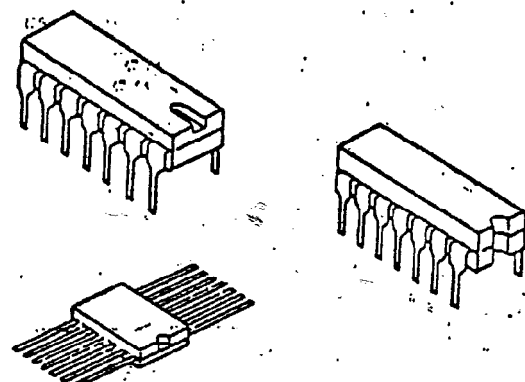
Sub-groups A6, A7 : not applicable.

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

TEXAS INSTRUMENTS LIMITED, MANTON LANE, BEDFORD. TELEPHONE: BEDFORD 67466 TELEX: 82178	BS 9403 F091 to F103 ISSUE 1, JULY, 1977
ELECTRONIC COMPONENTS OF ASSESSED QUALITY :	
DETAIL SPECIFICATION	
Outlines not to scale 	SILICON MONOLITHIC TTL HEX. SCHMITT TRIGGER INVERTERS
For detail dimensions: 14 Lead Flat-Pack - see Appendix I 14 Lead Dual in-line - BS 3934 SO-87B	FULL ASSESSMENT LEVEL AND APPLICATION CATEGORIES S1, S2, S3 AND S4
	TYPES 5414 6414 7414 See Clause 5
	CERAMIC/GLASS HERMETICALLY SEALED ENCAPSULATION OR DUAL-IN-LINE PLASTIC ENCAPSULATION

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
	Maximum continuous positive input voltage	5.5	V
	Maximum continuous negative input voltage	0.5	V
$-I_{IL}$	Maximum input current	1.2	mA
	Maximum reverse input current	1.0	mA
T_{amb}	Ambient operating temperature range	5414	-55 to +125 °C
		6414	-40 to +85 °C
		7414	-0 to +70 °C
T_{stg}	Storage temperature range		-65 to +150 °C
	Shock (0.5 ms duration)	14 700	m/s ²
	Vibration	196	m/s ²

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2. 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 5414	4.5	5.5	V
	6414 & 7414	4.75	5.25	V
V_{IL}	LOW state input voltage	0	1.1	V
V_{IH}	HIGH state input voltage 5414	1.5	5.5	V
	6414 & 7414		5.25	V
I_{CCL}	Total supply current per package at V_{CC} max. value	-	60.0	mA
I_{CCH}	Total supply current per package at V_{CC} max. value HIGH state output	-	36.0	mA
V_{T+}	Positive going threshold voltage $V_{CC} = 5.0$ V	1.5	2.0	V
V_{T-}	Negative going threshold voltage $V_{CC} = 5.0$ V	0.6	1.1	V
V_{OH}	HIGH state output voltage	2.4	-	V
	LOW state output voltage	-	0.4	V
$-I_{OH}$	HIGH state output current	-	800.0	μ A
I_{OL}	LOW state output current	-	16.0	mA
$-I_{OS}$	Output short circuit current applicable to only one output at a time	18.0	55.0	mA
$I_{IH(1)}$	HIGH state input current $V_{IN} = V_{IH}$ max.	-	1.0	mA
$I_{IH(2)}$	HIGH state input current $V_{IH} = 2.4$ V	-	40.0	μ A
$-I_{IL}$	LOW state input current $V_{IL} = 0.4$ V	-	1.2	mA
t_{PHL}	HIGH to LOW state propagation time at 25 °C $C_L = 15$ pF $R_L = 400 \Omega$	-	22.0	ns
t_{PLH}	LOW to HIGH state propagation time at 25 °C $C_L = 15$ pF $R_L = 400 \Omega$	-	22.0	ns

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TABLE I

FUNCTION TABLE (each inverter)

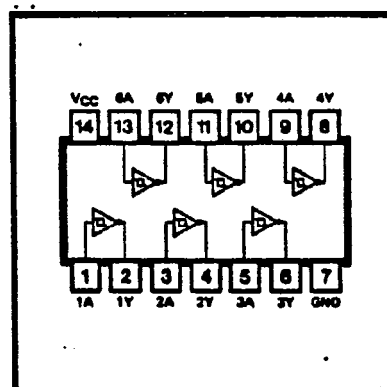
INPUT	OUTPUT
A	Y
L	H
H	L

H = HIGH state

L = LOW state

TABLE II

LOGIC CONNECTIONS



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3. MARKING

- 3.1 Each integrated circuit shall bear the following markings :
- (a) Terminal Identification.
 - (b) The Manufacturer's type number.
 - (c) The factory identification code.
 - (d) The date code.
- 3.2. Each package containing one or more of these circuits shall bear the markings (b), (c) and (d) above and in addition :
- (e) The B.S. detail specification number.

4. RELATED DOCUMENTS

This specification shall be read in conjunction with :

- BS 3934 'Dimensions of Semiconductor Devices'.
- BS 6001 'Sampling Procedures and Tables for Inspection by Attributes'.
- BS 9000 'General Requirements for Electronic Components of Assessed Quality'.
- PD 9002 'Qualified Products List for Electronic Components of Assessed Quality'.
- BS 9400 'Integrated Electronic Circuits of Assessed Quality : Generic Data and Methods of Test'.

5. ORDERING INFORMATION

Orders for these integrated circuits shall contain the following minimum information :

The integrated circuit type and package identification suffix to BS 9403 F.... as defined below :

		APPLICATION CATEGORY				FULL ASSESSMENT LEVEL
		S1	S2	S3	S4	
CERAMIC Dual-in-line (J) and Flat-pack (W)	5414	F091	F092	F093	F094	F095
	6414		F096	F097	F098	F099
	7414		F100	F101	F102	F103
PLASTIC Dual-in-line (N)	5414					F095
	6414					F099
	7414					F103
IDENTIFICATION PREFIX			SNB	SNN	SNX	SNS

EXAMPLE:

SNB 5414J to BS 9403 F092 defines a 5414 ceramic dual-in-line device to Application Category S2.