

This Specification contains a small amount of data which may not be legible. It has been acquired directly from the manufacturer or standards organization and Technical Indexes/IHS have not been able to obtain a better copy.

If the quality of this Specification is not fit for your intended purpose, please contact the relevant manufacturer or standards organization to clarify the details you require.

UTE

Spécification française harmonisée
Système CENELEC d'assurance de la qualité
12, Place des Etats-Unis
75783 PARIS CEDEX 16

Téléphone : (1) 47 23 72 57

Télex : 620434F

CECC 90 101-003

EDITION 1 - Novembre 1987

ISSUE 1 - November 1987



Page 0

Nombre total de pages : 13
Total number of pages :

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 23

Adoptée le 16 novembre 1987

BS9403 F004, 006, 008

Issue 2

BS9403 F013, 015, 017

July, 1977

BS9403 F019 to F025

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 04**INVERSEURS****HEX 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 :
ASSESSMENT LEVELS :

P, Y, L

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.

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.

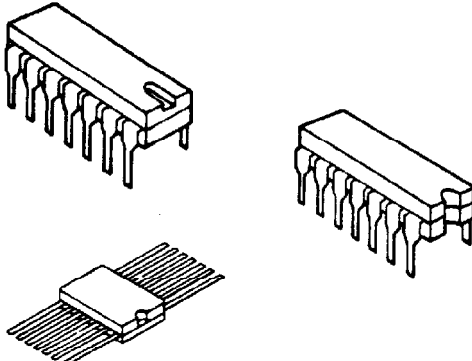
Sub-groups A6, A7 : not applicable.

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

BRITISH STANDARDS INSTITUTION 2, PARK STREET, LONDON, W1A 2BS	BS9403 F004,006,008 BS9403 F013,015,017 BS9403 F019 to 025 ISSUE 2, JULY, 1977
ELECTRONIC COMPONENTS OF ASSESSED QUALITY: DETAIL SPECIFICATION	
Outlines not to scale.  For details dimensions: 14 Lead Flat-Pack – see Appendix I 14 Lead Dual-in-line – BS 3934 SO-87B	SILICON MONOLITHIC TTL HEX. INVERTERS.
	FULL ASSESSMENT LEVEL AND APPLICATION CATEGORIES S1, S2, S3 AND S4
	TYPES 5404 6404 7404 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)		Units	
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	1.6	mA
	Maximum reverse input current	1.0	mA
T_{amb}	Ambient operating temperature range	5404	-55 to +125 °C
		6404	-40 to + 85 °C
		7404	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

Copies of this specification are available from manufacturers listed in the Qualified Products List Part 1, of PD 9002.

BS 9403 F004, 006, 008
 BS 9403 F013, 015, 017
 BS 9403 F019 to 025
 Issue 2, July, 1977

2. Recommended conditions of use and associated characteristics (not for inspection purposes)
 Over the full ambient operating temperature range unless otherwise stated.

			Min.	Max.	Units
V_{CC}	Positive supply voltage	5404	4.5	5.5	V
V_{IH}	HIGH state input voltage	6404 & 7404	4.75	5.25	V
		5404	2.0	5.5	V
		6404 & 7404	2.0	5.25	V
I_{CCL}	Total supply current per package at V_{CC} maximum value LOW state outputs			33.00	mA
I_{CCH}	Total supply current per package at V_{CC} maximum value HIGH state outputs			12.0	mA
V_{OH}	HIGH state output voltage		2.4		V
V_{IL}	LOW state input voltage		0	0.8	V
V_{OL}	LOW state output voltage			0.4	V
$I_{IH}(1)$	HIGH state input current at, $V_{IN} = V_{IH}$ maximum value			1.0	mA
$I_{IH}(2)$	HIGH state input current at, $V_{IN} = 2.4V$			40.0	μA
$-I_{IL}$	LOW state input current at, $V_{IN} = 0.4V$			1.6	mA
I_{OL}	LOW state output current			16.0	mA
$-I_{OH}$	HIGH state output current			400.0	μA
$-I_{OS}$	Output short-circuit current	5404	20.0	55.0	mA
		6404 & 7404	18.0	55.0	mA
t_{PHL}	HIGH to LOW state propagation time at 25°C*			15.0	ns
t_{PLH}	LOW to HIGH state propagation time at 25°C*			22.0	ns

*See subgroup A4 for details

Table 1
 Function table (each inverter)

Input	Output
H	L
L	H

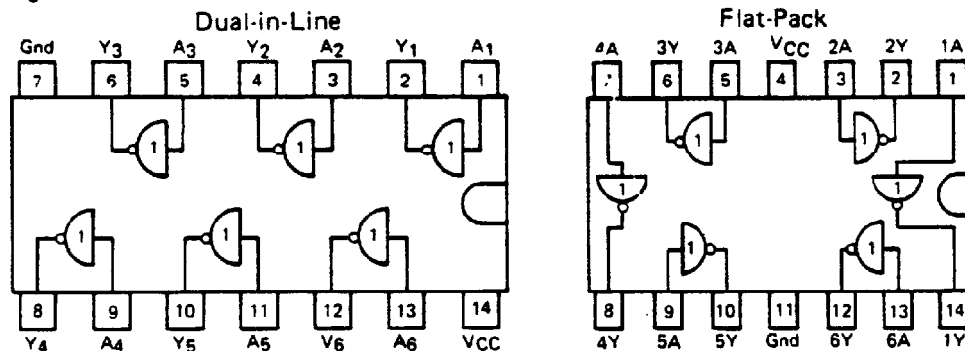
H = HIGH state

L = LOW state

BS 9403 F004, 006, 008
BS 9403 F013, 015, 017
BS 9403 F019 to 025
Issue 2, July, 1977

Table II

Logic diagram and connections



3. Marking

(1) Each integrated circuit shall bear the following markings

- Terminal identification.
- The manufacturer's type number.
- The factory identification code, or manufacturer's trade mark.
- The date code.

(2) Each package containing one or more of these circuits shall bear the markings b, c and d above and in addition.

- The BS detail specification number. Example BS 9403 F015

4. Related documents

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:

Manufacturer's integrated circuit type and package identification as detailed in PD 9002 to BS 9403F...

as defined below.

TYPE		APPLICATION CATEGORY				FULL ASSESSMENT LEVEL
		S1	S2	S3	S4	
CERAMIC Dual-in-line and Flat-Pack	5404	F013	F015	F017	F019	F004
	6404	*	F020	F021	F022	F006
	7404	*	F023	F024	F025	F008
PLASTIC Dual-in-line	5404	*	*	*	*	F004
	6404	*	*	*	*	F006
	7404	*	*	*	*	F008

* = Not available at present.