

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 90 101-039

EDITION 1 - Novembre 1987

ISSUE 1 - November 1987



Page 0

Nombre total de pages : 16

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 59

Adoptée le 16 novembre 1987

BS9401 F247 to F259

Issue 1

June, 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

54/64/74 132

CIRCUIT ET-NON
TRIGGER DE SCHMITT

**QUAD 2-INPUT POSITIVE NAND
SCHMITT TRIGGER GATES**

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.

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.

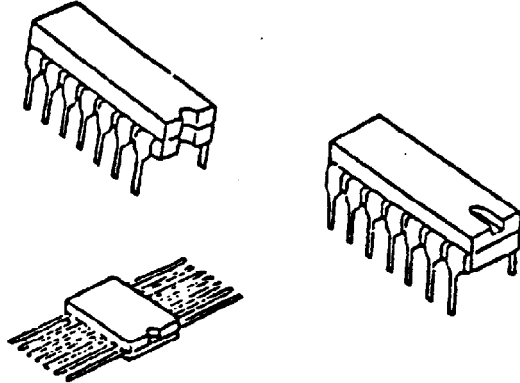
Sub-groups A6, A7 : not applicable.

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 9401 F247 to F259 ISSUE 1 JUNE, 1977
ELECTRONIC COMPONENTS OF ASSESSED QUALITY : DETAIL SPECIFICATION	
Outlines not to scale  For detail dimensions 14 Lead Flat-Pack - see Appendix I 14 Lead Dual-in-Line - BS 3934 SO-87B	SILICON MONOLITHIC TTL QUADRUPLE TWO-INPUT POSITIVE-NAND SCHMITT TRIGGER GATES
	FULL ASSESSMENT LEVEL AND APPLICATION CATEGORIES S1, S2, S3 AND S4
	TYPES 54132 64132 74132 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	54132	-55 to +125 °C
		64132	-40 to + 85 °C
		74132	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

BS 9401 F247 to F259
ISSUE I,
JUNE, 1977

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 54132	4.5	5.5	V
	64132 & 74132	4.75	5.25	V
V_{IH}	HIGH state input voltage 54132	2.0	5.5	V
	64132 & 74132	2.0	5.25	V
I_{CCL}	Total supply current per package at V_{CC} maximum with LOW state outputs	-	40.0	mA
I_{CCH}	Total supply current per package at V_{CC} maximum with HIGH state outputs	-	24.0	mA
V_{OH}	HIGH state output voltage	2.4	-	V
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_{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 $V_{IN} = V_{OH}$ minimum value	-	40.0	μ A
$-I_{IL}$	LOW state input current at $V_{IN} = V_{OL}$ maximum value	-	1.2	mA
I_{OL}	LOW state output current	-	16.0	mA
$-I_{OH}$	HIGH state output current	-	800.0	μ A
$-I_{OS}$	Output short circuit current	18.0	55.0	mA
t_{PHL}	HIGH to LOW state propagation time at 25 °C $C_L = 15$ pF $R_L = 400$ Ω	-	22.0	ns
t_{PLH}	LOW to HIGH state propagation time at 25 °C $C_L = 15$ pF $R_L = 400$ Ω	-	22.0	ns

BS 9401 F247 to F259
ISSUE 1,
JUNE, 1977

TABLE I

FUNCTION TABLE (each gate)

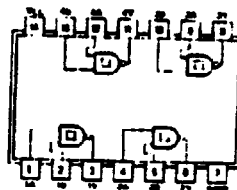
INPUT		OUTPUT
A	B	Y
H	L	H
L	H	H
H	L	H
H	H	L

H = HIGH state

L = LOW state

TABLE II

LOGIC CONNECTIONS



BS 9401 F247 to F259

ISSUE 1

JUNE, 1977

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, or manufacturer's trade mark.
- (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:

- (a) The B.S. detail specification number.

4. RELATED DOCUMENTS.**BS 2011** Basic environmental testing procedures.**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.**BS 9400** Integrated electronic circuits of assessed quality: Generic data and methods of test.**PD 9002** Qualified Products List for electronic components of assessed quality.**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 9401 F..... as defined below -

TYPE		APPLICATION CATEGORY				FULL ASSESSMENT LEVEL
		S1	S2	S3	S4	
CERAMIC Dual-in-line and Flatpack	54132	F247	F248	F249	F250	F251
	64132	•	F252	F253	F254	F255
	74132	•	F256	F257	F258	F259
PLASTIC Dual-in-line	54132	•	•	•	•	F251
	64132	•	•	•	•	F255
	74132	•	•	•	•	F259

Notes: • Not available at present.