

UTE

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CECC 90 101-006

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 26

Adoptée le 16 novembre 1987

BS9401 F1038 to F1050

Issue 1

August, 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 07

AMPLIFICATEUR DE BUS A SORTIES
COLLECTEUR OUVERT HAUTE TENSION

*HEX BUFFERS/DRIVERS WITH OPEN
COLLECTOR HIGH VOLTAGE OUTPUTS*

TECHNOLOGIE DE FABRICATION :
TYPICAL CONSTRUCTION :

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

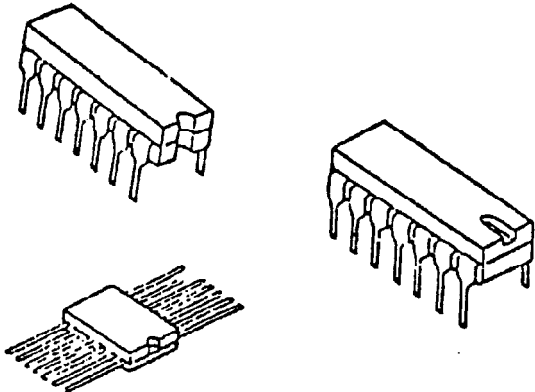
*Silicon monolithic bipolar integrated circuit,
cavity/non-cavity packages.*

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.

TEXAS INSTRUMENTS LIMITED, MANTON LANE, BEDFORD. TELEPHONE: BEDFORD 67466 TELEX: 82178	BS 9401 F1038 to F1050 ISSUE 1 AUGUST 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 HEX. BUFFERS/DRIVERS WITH OPEN-COLLECTOR HIGH-VOLTAGE OUTPUTS
	FULL ASSESSMENT LEVEL AND APPLICATION CATEGORIES S1, S2, S3 AND S4
	TYPES 5407 6407 7407 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 positive output voltage	30.0	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	5407	-55 to +125 °C
		6407	-40 to + 85 °C
		7407	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 F1038 to F1050
 ISSUE I,
 AUGUST 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.

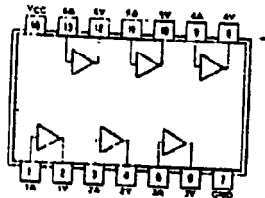
		Min.	Max.	Unit.
V_{CC}	Positive supply voltage 5407 6407 & 7407	4.5 4.75	5.5 5.25	V
V_{IH}	HIGH state input voltage 5407 6407 & 7407	2.0 2.0	5.0 5.25	V V
I_{CCH}	Total supply current per package at V_{CC} maximum value with HIGH state outputs	-	41.0	mA
I_{CCL}	Total supply current per package at V_{CC} maximum value with LOW state outputs	-	30.0	mA
V_{OH}	HIGH state output voltage	2.4	30.0	V
V_{IL}	LOW state input voltage	0	0.8	V
V_{OL}	LOW state output voltage	-	0.7	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	-	40.0	μ A
$-I_{IL}$	LOW state input current at $V_{IN} = V_{OL}$ maximum value	-	1.6	mA
I_{OL}	LOW state output current 5407 6407 & 7407	-	30.0 40.0	mA mA
$-I_{OHX}$	HIGH state output current	-	250.0	μ A
t_{PHL}	HIGH to LOW state propagation time at 25 °C $C_L = 15$ pF $R_L = 110 \Omega$	-	30.0	ns
t_{PLH}	LOW to HIGH state propagation time at 25 °C $C_L = 15$ pF $R_L = 110 \Omega$	-	10.0	ns

TABLE IFUNCTION TABLE (each gate)

INPUT	OUTPUT
A	B
L	L
H	H

H = HIGH state

L = LOW state

TABLE IILOGIC CONNECTIONS

BS 9401 F1038 to F1050
ISSUE I,
AUGUST 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.
 - (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. - e.g. BS 9401 F1039

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 :

The integrated circuit type and package identification suffix to BS 9401 F.... as defined below :

TYPE		APPLICATION CATEGORY				FULL ASSESSMENT LEVEL
		S1	S2	S3	S4	
<u>CERAMIC</u> Dual-in-line (J) and Flat-pack (W)	5407	F1038	F1039	F1040	F1041	F1042
	6407		F1043	F1044	F1045	F1046
	7407		F1047	F1048	F1049	F1050
<u>PLASTIC</u> Dual-in-line (N)	5407					F1042
	6407					F1046
	7407					F1050
IDENTIFICATION PREFIX			SNB	SNN	SNT	SNS

EXAMPLE :

SNB 5407J to BS 9401 F1039 defines a 5407 ceramic dual-in-line device to Application Category S2.