

CYT4033D

**SURFACE MOUNT  
DUAL, ISOLATED  
PNP SILICON TRANSISTORS**



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CYT4033D type consists of two (2) isolated PNP silicon transistors packaged in an epoxy molded SOT-228 surface mount case. This SUPERmini™ device is manufactured by the epitaxial planar process.

**MARKING: FULL PART NUMBER**



**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C)

Collector-Base Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Continuous Collector Current
Peak Collector Current
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

**SYMBOL**

V <sub>CBO</sub>	80
V <sub>CEO</sub>	80
V <sub>EBO</sub>	5.0
I <sub>C</sub>	1.0
I <sub>CM</sub>	1.5
P <sub>D</sub>	2.0
T <sub>J</sub> , T <sub>stg</sub>	-65 to +150
Θ <sub>JA</sub>	62.5

**UNITS**

V
V
V
A
A
W
°C
°C/W

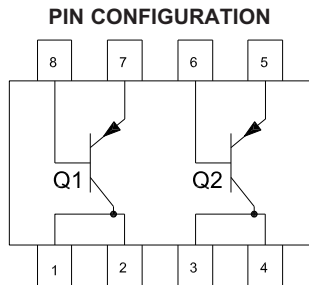
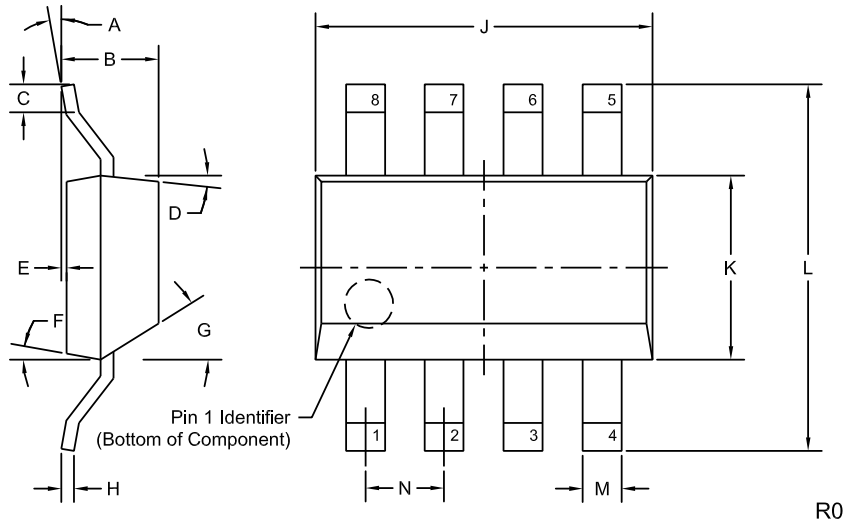
**ELECTRICAL CHARACTERISTICS PER TRANSISTOR:** (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>CBO</sub>	V <sub>CB</sub> =60V		50	nA
I <sub>EBO</sub>	V <sub>EB</sub> =5.0V		10	nA
BV <sub>CBO</sub>	I <sub>C</sub> =10μA	80		V
BV <sub>CEO</sub>	I <sub>C</sub> =10mA	80		V
BV <sub>EBO</sub>	I <sub>E</sub> =10μA	5.0		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		0.15	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		0.50	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		0.90	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		1.10	V
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =0.1mA	75		
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =100mA	100	300	
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =500mA	70		
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =1.0A	25		
f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA, f=1.0MHz	100		MHz
C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1.0MHz		20	pF
C <sub>ib</sub>	V <sub>EB</sub> =0.5V, I <sub>C</sub> =0, f=1.0MHz		110	pF

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**SOT-228 CASE - MECHANICAL OUTLINE**



- LEAD CODE:**
- |                 |               |
|-----------------|---------------|
| 1) Collector Q1 | 5) Emitter Q2 |
| 2) Collector Q1 | 6) Base Q2    |
| 3) Collector Q2 | 7) Emitter Q1 |
| 4) Collector Q2 | 8) Base Q1    |

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0°	10°	0°	10°
B	--	0.075	--	1.90
C	0.018	--	0.45	--
D	4°	10°	4°	10°
E	0.000	0.004	0.00	0.10
F	4°	10°	4°	10°
G	36°	45°	36°	45°
H	0.010		0.25	
J	0.248	0.264	6.30	6.70
K	0.130	0.146	3.30	3.70
L	0.264	0.287	6.70	7.30
M	0.027	0.030	0.68	0.76
N	0.060		1.53	

SOT-228 (REV: R0)

**MARKING: FULL PART NUMBER**

R1 (23-February 2010)