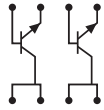
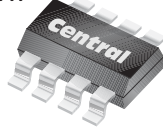


CYT3019D

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

SUPERmini™



SOT-228 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CYT3019D type consists of two (2) isolated NPN 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: ($T_A=25^\circ\text{C}$)

Collector-Base Voltage	V_{CBO}	140	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	7.0	V
Continuous Collector Current	I_C	1.0	A
Peak Collector Current	I_{CM}	1.5	A
Power Dissipation	P_D	2.0	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	62.5	$^\circ\text{C/W}$

SYMBOL

V_{CBO}	140	V
V_{CEO}	80	V
V_{EBO}	7.0	V
I_C	1.0	A
I_{CM}	1.5	A
P_D	2.0	W
T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
θ_{JA}	62.5	$^\circ\text{C/W}$

UNITS

ELECTRICAL CHARACTERISTICS PER TRANSISTOR: ($T_A=25^\circ\text{C}$ unless otherwise noted)

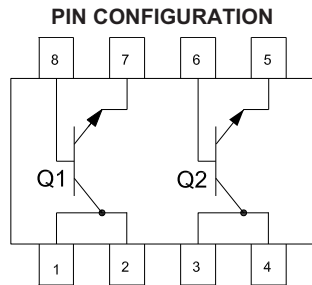
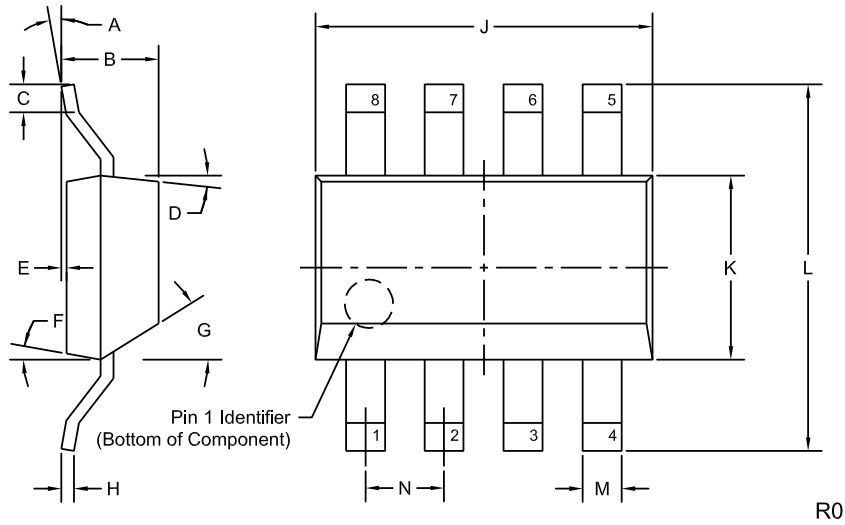
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	$V_{CB}=90\text{V}$		10	nA
I_{EBO}	$V_{EB}=5.0\text{V}$		10	nA
BV_{CBO}	$I_C=100\mu\text{A}$	140		V
BV_{CEO}	$I_C=30\text{mA}$	80		V
BV_{EBO}	$I_E=100\mu\text{A}$	7.0		V
$V_{CE(SAT)}$	$I_C=150\text{mA}, I_B=15\text{mA}$		0.20	V
$V_{CE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$		0.50	V
$V_{BE(SAT)}$	$I_C=150\text{mA}, I_B=15\text{mA}$		1.10	V
h_{FE}	$V_{CE}=10\text{V}, I_C=0.1\text{mA}$	50		
h_{FE}	$V_{CE}=10\text{V}, I_C=10\text{mA}$	90		
h_{FE}	$V_{CE}=10\text{V}, I_C=150\text{mA}$	100	300	
h_{FE}	$V_{CE}=10\text{V}, I_C=500\text{mA}$	50		
h_{FE}	$V_{CE}=10\text{V}, I_C=1.0\text{A}$	15		
f_T	$V_{CE}=10\text{V}, I_C=50\text{mA}, f=20\text{MHz}$	100	400	MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		12	pF
C_{ib}	$V_{EB}=0.5\text{V}, I_C=0, f=1.0\text{MHz}$		60	pF
NF	$V_{CE}=10\text{V}, I_C=100\mu\text{A}, R_S=1.0\text{k}\Omega, f=1.0\text{kHz}$		4.0	dB

R2 (9-November 2010)

CYT3019D
SURFACE MOUNT
DUAL, ISOLATED
NPN SILICON TRANSISTORS



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 |

MARKING: FULL PART NUMBER

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)

R2 (9-November 2010)