

CYT5551D

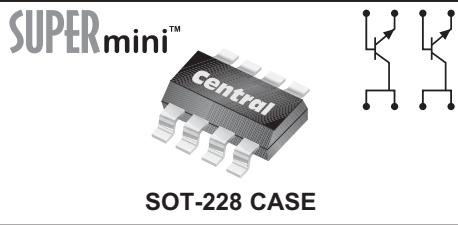
**SURFACE MOUNT
DUAL, ISOLATED
NPN SILICON TRANSISTORS**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CYT5551D type consists of two (2) isolated NPN silicon transistors packaged in an epoxy molded SOT-228 surface mount case. Manufactured by the epitaxial planar process, this SUPERmini™ device is ideal for high voltage amplifier applications.



MARKING: FULL PART NUMBER

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

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

SYMBOL		UNITS
V_{CBO}	180	V
V_{CEO}	160	V
V_{EBO}	6.0	V
I_C	600	mA
P_D	2.0	W
T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Θ_{JA}	62.5	$^\circ\text{C/W}$

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

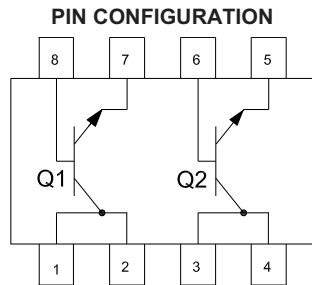
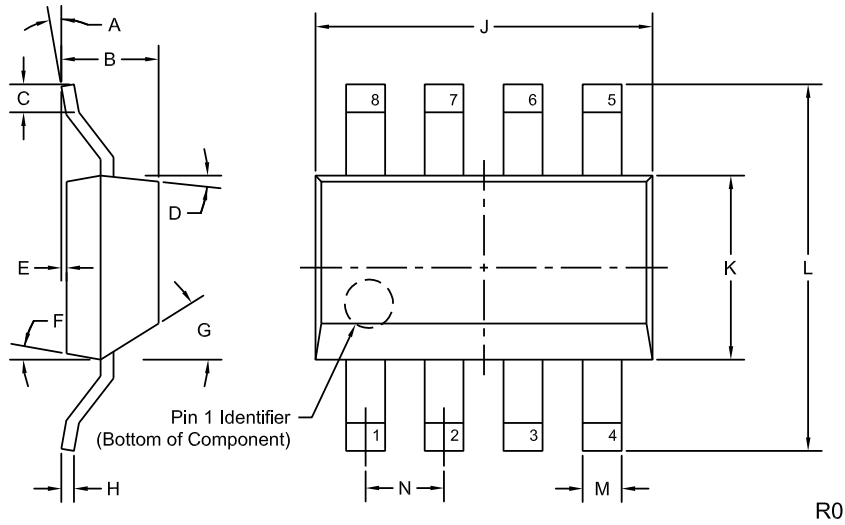
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	$V_{CB}=120\text{V}$		50	nA
I_{CBO}	$V_{CB}=120\text{V}, T_A=100^\circ\text{C}$		50	μA
I_{EBO}	$V_{BE}=4.0\text{V}$		50	nA
BV_{CBO}	$I_C=100\mu\text{A}$	180		V
BV_{CEO}	$I_C=1.0\text{mA}$	160		V
BV_{EBO}	$I_E=10\mu\text{A}$	6.0		V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.15	V
$V_{CE(SAT)}$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		0.20	V
$V_{BE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		1.00	V
$V_{BE(SAT)}$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		1.00	V
h_{FE}	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}$	80		
h_{FE}	$V_{CE}=5.0\text{V}, I_C=10\text{mA}$	80	250	
h_{FE}	$V_{CE}=5.0\text{V}, I_C=50\text{mA}$	30		
f_T	$V_{CE}=10\text{V}, I_C=10\text{mA}, f=100\text{MHz}$	100	300	MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		6.0	pF
C_{ib}	$V_{EB}=0.5\text{V}, I_C=0, f=1.0\text{MHz}$		20	pF
h_{fe}	$V_{CE}=10\text{V}, I_C=1.0\text{mA}, f=1.0\text{kHz}$	50	200	
NF	$V_{CE}=5.0\text{V}, I_C=200\mu\text{A}, R_S=10\Omega,$ $f=10\text{Hz to } 15.7\text{kHz}$		8.0	dB

R2 (23-February 2010)

CYT5551D
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 (23-February 2010)