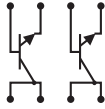
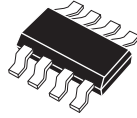


CYT5551D

SURFACE MOUNT
DUAL, ISOLATED NPN
SILICON TRANSISTORS

SUPERmini™



SOT-228 CASE

Central™
Semiconductor Corp.

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 CODE: FULL PART NUMBER

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

Collector-Base Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
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	$^\circ\text{C/W}$

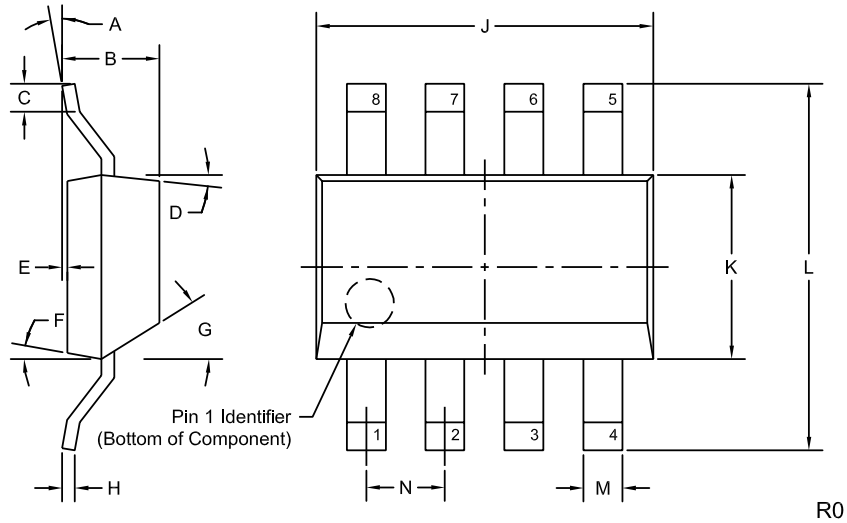
ELECTRICAL CHARACTERISTICS PER TRANSISTOR: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	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

R1 (11-August 2005)

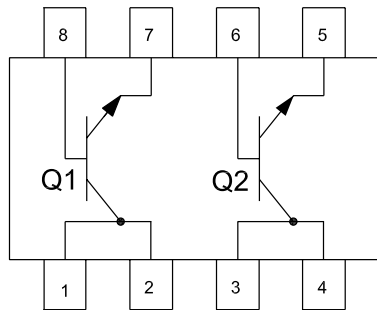
**SURFACE MOUNT
DUAL, ISOLATED NPN
SILICON TRANSISTORS**

SOT-228 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) COLLECTOR Q1
- 2) COLLECTOR Q1
- 3) COLLECTOR Q2
- 4) COLLECTOR Q2
- 5) EMITTER Q2
- 6) BASE Q2
- 7) EMITTER Q1
- 8) BASE Q1



SYMBOL	DIMENSIONS			
	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 CODE:
FULL PART NUMBER**

R1 (11-August 2005)