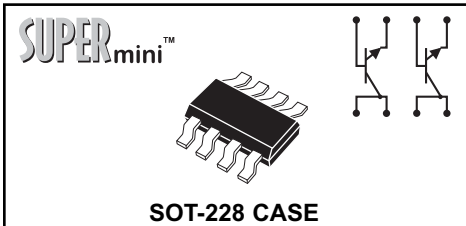


**CYT5551HCD**  
**SURFACE MOUNT**  
**DUAL, ISOLATED NPN HIGH CURRENT**  
**SILICON TRANSISTORS**



# Central™

**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CYT5551HCD type consists of two (2) isolated NPN high current 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 current applications.

**MARKING CODE: FULL PART NUMBER**

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

	<b>SYMBOL</b>		<b>UNITS</b>
Collector-Base Voltage	$V_{CBO}$	180	V
Collector-Emitter Voltage	$V_{CEO}$	160	V
Emitter-Base Voltage	$V_{EBO}$	6.0	V
Collector Current	$I_C$	1.0	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	$\theta_{JA}$	62.5	$^\circ\text{C/W}$

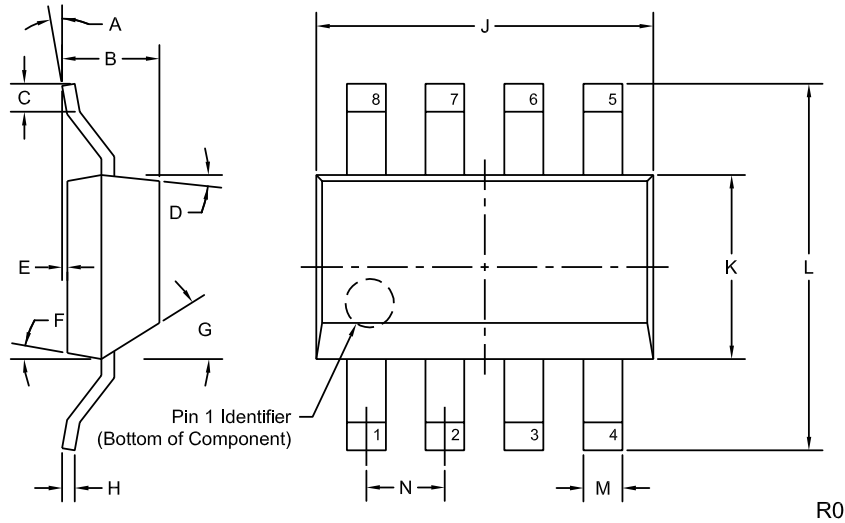
**ELECTRICAL CHARACTERISTICS PER TRANSISTOR:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$I_{CBO}$	$V_{CB}=120\text{V}$			50	nA
$I_{CBO}$	$V_{CB}=120\text{V}, T_A=100^\circ\text{C}$			50	$\mu\text{A}$
$I_{EBO}$	$V_{BE}=4.0\text{V}$			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			
$h_{FE}$	$V_{CE}=10\text{V}, I_C=1.0\text{A}$		10		
$f_T$	$V_{CE}=10\text{V}, I_C=10\text{mA}, f=100\text{MHz}$	100			MHz
$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$			15	pF

R1 (11-August 2005)

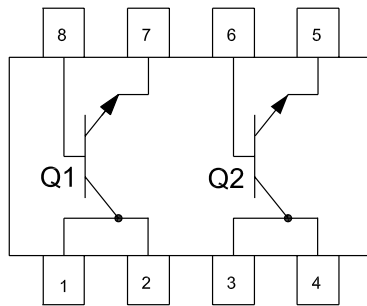
**SURFACE MOUNT  
DUAL, ISOLATED NPN HIGH CURRENT  
SILICON TRANSISTORS**

**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	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)