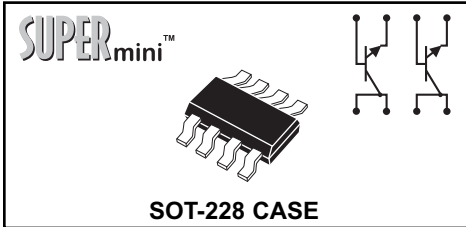


**CYTA44D**  
**SURFACE MOUNT**  
**DUAL, ISOLATED NPN HIGH VOLTAGE**  
**SILICON TRANSISTORS**



# Central™

**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CYTA44D type consists of two (2) isolated NPN high voltage 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 applications.

**MARKING CODE: FULL PART NUMBER**

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

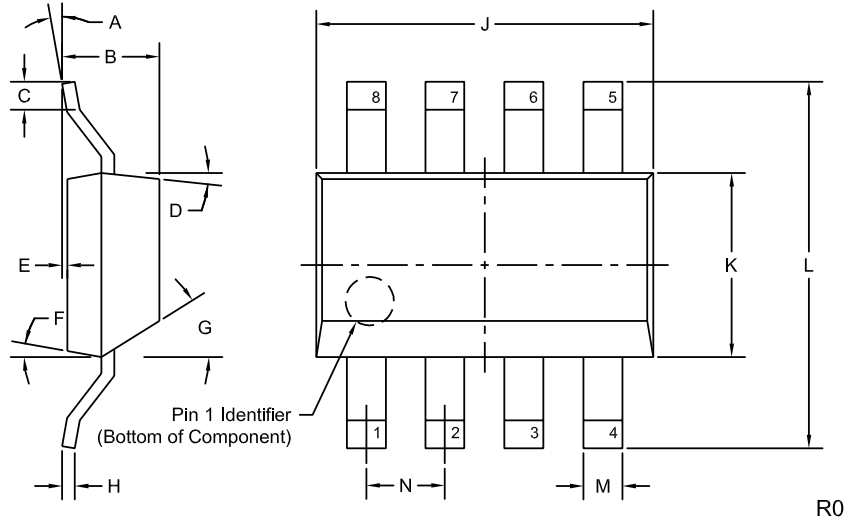
	<b>SYMBOL</b>		<b>UNITS</b>
Collector-Base Voltage	$V_{CBO}$	450	V
Collector-Emitter Voltage	$V_{CEO}$	400	V
Emitter-Base Voltage	$V_{EBO}$	6.0	V
Collector Current	$I_C$	300	mA
Power Dissipation	$P_D$	2.0	W
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +150	°C
Thermal Resistance	$\theta_{JA}$	62.5	°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>MAX</b>	<b>UNITS</b>
$I_{CBO}$	$V_{CB}=400\text{V}$		100	nA
$I_{CES}$	$V_{CE}=400\text{V}$		500	nA
$I_{EBO}$	$V_{BE}=4.0\text{V}$		100	nA
$BV_{CBO}$	$I_C=100\mu\text{A}$	450		V
$BV_{CES}$	$I_C=100\mu\text{A}$	450		V
$BV_{CEO}$	$I_C=1.0\text{mA}$	400		V
$BV_{EBO}$	$I_E=10\mu\text{A}$	6.0		V
$V_{CE(SAT)}$	$I_C=1.0\text{mA}, I_B=0.1\text{mA}$		0.40	V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.50	V
$V_{CE(SAT)}$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		0.75	V
$V_{BE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.75	V
$h_{FE}$	$V_{CE}=10\text{V}, I_C=1.0\text{mA}$	40		
$h_{FE}$	$V_{CE}=10\text{V}, I_C=10\text{mA}$	50	200	
$h_{FE}$	$V_{CE}=10\text{V}, I_C=50\text{mA}$	45		
$h_{FE}$	$V_{CE}=10\text{V}, I_C=100\text{mA}$	20		
$f_T$	$V_{CE}=10\text{V}, I_C=10\text{mA}, f=10\text{MHz}$	20		MHz
$C_{ob}$	$V_{CB}=20\text{V}, I_E=0, f=1.0\text{MHz}$		7.0	pF
$C_{ib}$	$V_{EB}=0.5\text{V}, I_C=0, f=1.0\text{MHz}$		130	pF

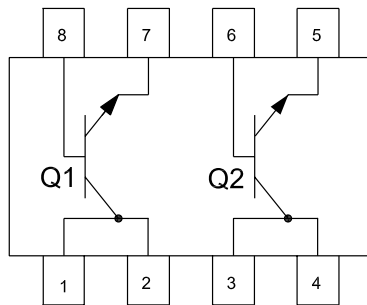
**SURFACE MOUNT  
DUAL, ISOLATED NPN HIGH VOLTAGE  
SILICON TRANSISTORS**

**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**