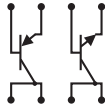
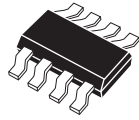


CYTA4494D

**SURFACE MOUNT
DUAL, ISOLATED
COMPLEMENTARY NPN & PNP
HIGH VOLTAGE
SILICON TRANSISTORS**

SUPERmini™



SOT-228 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CYTA4494D type consists of one (1) NPN high voltage silicon transistor and one (1) complementary PNP high voltage silicon transistor 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: ($T_A=25^\circ\text{C}$)

	SYMBOL	NPN (Q1)	PNP (Q2)	UNITS
Collector-Base Voltage	V_{CB0}	450	400	V
Collector-Emitter Voltage	V_{CE0}	400	400	V
Emitter-Base Voltage	V_{EBO}	6.0	6.0	V
Collector Current	I_C	300	300	mA
Power Dissipation	P_D	2.0	2.0	W
Operating and Storage				
Junction Temperature	T_J, T_{stg}	-65 to +150		$^\circ\text{C}$
Thermal Resistance	θ_{JA}	62.5		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	NPN (Q1)		PNP (Q2)		UNITS
		MIN	MAX	MIN	MAX	
I_{CB0}	$V_{CB}=350\text{V}$				100	nA
I_{CES}	$V_{CE}=350\text{V}$				500	nA
I_{CB0}	$V_{CB}=400\text{V}$		100			nA
I_{CES}	$V_{CE}=400\text{V}$		500			nA
I_{EBO}	$V_{BE}=4.0\text{V}$		100		100	nA
BV_{CB0}	$I_C=100\mu\text{A}$	450		400		V
BV_{CES}	$I_C=100\mu\text{A}$	450		400		V
BV_{CE0}	$I_C=1.0\text{mA}$	400		400		V
BV_{EBO}	$I_E=10\mu\text{A}$	6.0		6.0		V
$V_{CE(SAT)}$	$I_C=1.0\text{mA}, I_B=0.1\text{mA}$		0.40		0.40	V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.50		0.50	V
$V_{CE(SAT)}$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		0.75		0.75	V
$V_{BE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.75		0.75	V
h_{FE}	$V_{CE}=10\text{V}, I_C=1.0\text{mA}$	40		40		
h_{FE}	$V_{CE}=10\text{V}, I_C=10\text{mA}$	50	200	50	200	
h_{FE}	$V_{CE}=10\text{V}, I_C=50\text{mA}$	45		45		
h_{FE}	$V_{CE}=10\text{V}, I_C=100\text{mA}$	20		20		

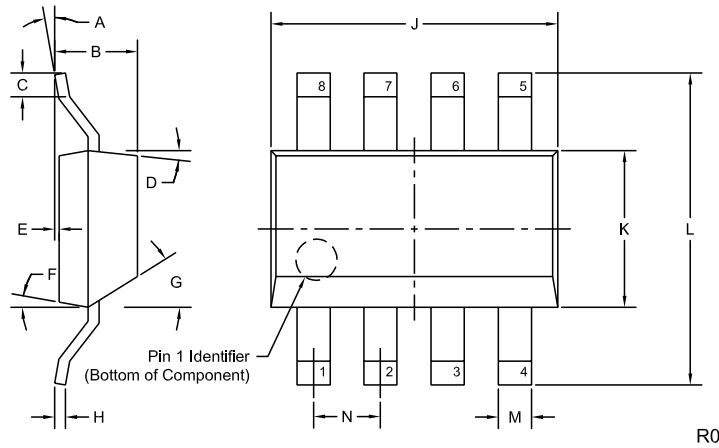
R1 (11-August 2005)

**SURFACE MOUNT
DUAL, ISOLATED
COMPLEMENTARY NPN & PNP
HIGH VOLTAGE
SILICON TRANSISTORS**

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

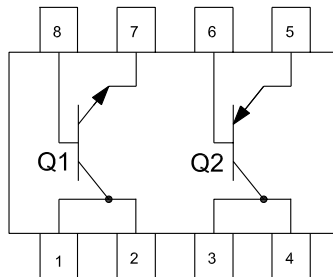
SYMBOL	TEST CONDITIONS	NPN (Q1)		PNP (Q2)		UNITS
		MIN	MAX	MIN	MAX	
f_T	$V_{CE}=10\text{V}, I_C=10\text{mA}, f=10\text{MHz}$	20		20		MHz
C_{ob}	$V_{CB}=20\text{V}, I_E=0, f=1.0\text{MHz}$		7.0		7.0	pF
C_{ib}	$V_{EB}=0.5\text{V}, I_C=0, f=1.0\text{MHz}$		130		130	pF

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)