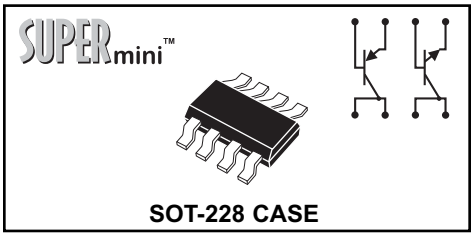
CYTA4494D

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



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°C)

	SYMBOL	NPN (Q1)	PNP (Q2)	UNITS
Collector-Base Voltage	V_{CBO}	450	400	V
Collector-Emitter Voltage	V_{CEO}	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		°C
Thermal Resistance	Θ_{JA}	62.5		°C/W

ELECTRICAL CHARACTERISTICS PER TRANSISTOR: (T_A=25°C unless otherwise noted)

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

R1 (11-August 2005)

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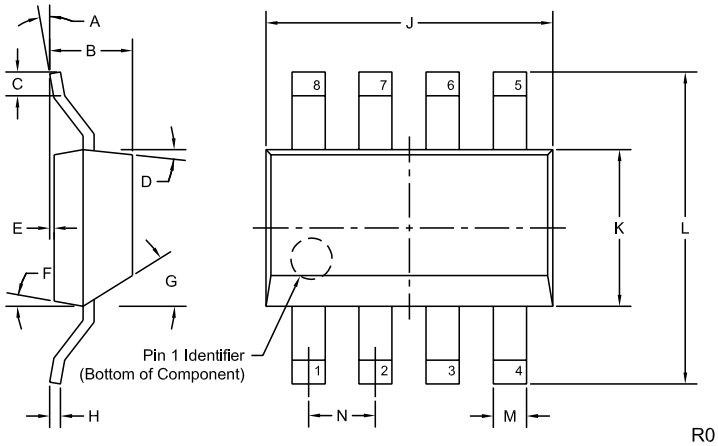
ELECTRICAL CHARACTERISTICS PER TRANSISTOR (Continued): (T_A=25°C unless otherwise noted)

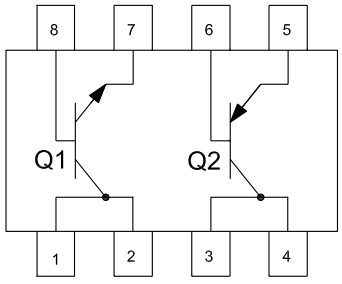
		NPN (Q1)		PNP (Q2)		
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
f_T	V_{CE}=10V, I_C=10mA, f=10MHz	20		20		MHz
C_{ob}	V_{CB}=20V, I_E=0, f=1.0MHz		7.0		7.0	pF
C_{ib}	V_{EB}=0.5V, I_C=0, f=1.0MHz		130		130	pF

SOT-228 CASE - MECHANICAL OUTLINE



R0

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



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)