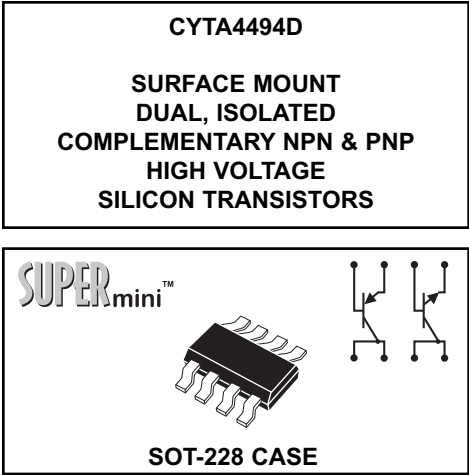




Central™

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)

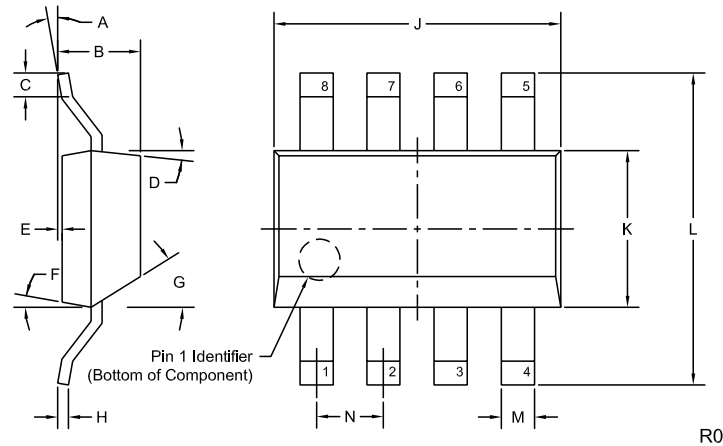
SYMBOL	TEST CONDITIONS	NPN (Q1)		PNP (Q2)		UNITS
		MIN	MAX	MIN	MAX	
I _{CBO}	V _{CB} =350V				100	nA
I _{CES}	V _{CE} =350V				500	nA
I _{CBO}	V _{CB} =400V		100			nA
I _{CES}	V _{CE} =400V		500			nA
I _{EBO}	V _{BE} =4.0V		100		100	nA
BV _{CBO}	I _C =100μA	450		400		V
BV _{CES}	I _C =100μA	450		400		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		

**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)

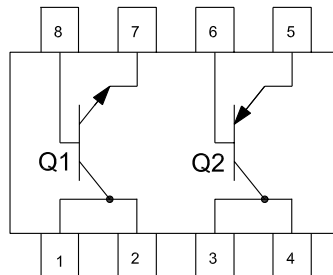
SYMBOL	TEST CONDITIONS	NPN (Q1)		PNP (Q2)		UNITS
		MIN	MAX	MIN	MAX	
f_T	$V_{CE}=10\text{V}$, $I_C=10\text{mA}$, $f=10\text{MHz}$	20		20		MHz
C_{ob}	$V_{CB}=20\text{V}$, $I_E=0$, $f=1.0\text{MHz}$		7.0		7.0	pF
C_{ib}	$V_{EB}=0.5\text{V}$, $I_C=0$, $f=1.0\text{MHz}$		130		130	pF

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)