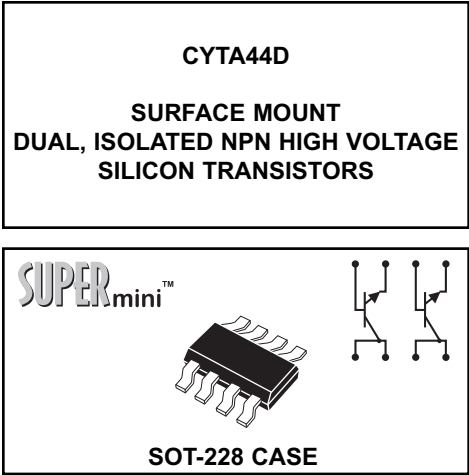




Central™

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°C)

Collector-Base Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Collector Current
Power Dissipation
Operating and Storage
Junction Temperature
Thermal Resistance

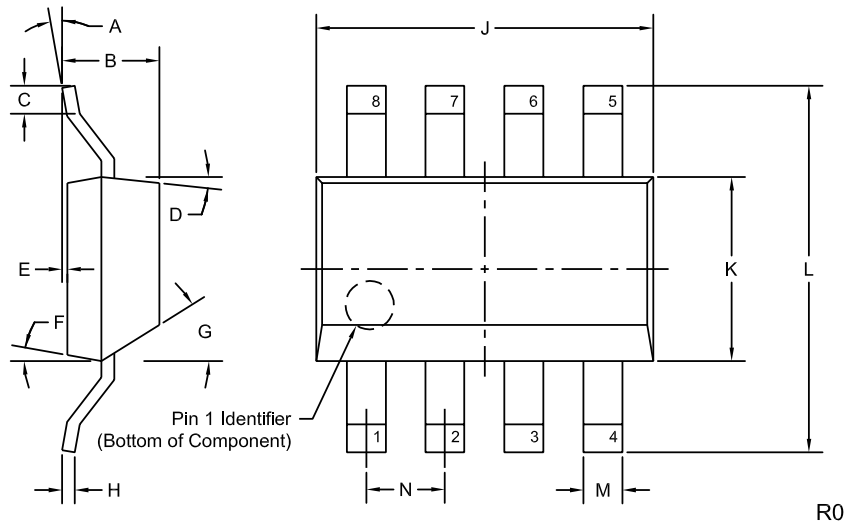
SYMBOL		UNITS
V _{CBO}	450	V
V _{CEO}	400	V
V _{EBO}	6.0	V
I _C	300	mA
P _D	2.0	W
T _J , T _{stg}	-65 to +150	°C
θ _{JA}	62.5	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =400V		100	nA
I _{CES}	V _{CE} =400V		500	nA
I _{EBO}	V _{BE} =4.0V		100	nA
BV _{CBO}	I _C =100μA	450		V
BV _{CES}	I _C =100μA	450		V
BV _{CEO}	I _C =1.0mA	400		V
BV _{EBO}	I _E =10μA	6.0		V
V _{CE(SAT)}	I _C =1.0mA, I _B =0.1mA		0.40	V
V _{CE(SAT)}	I _C =10mA, I _B =1.0mA		0.50	V
V _{CE(SAT)}	I _C =50mA, I _B =5.0mA		0.75	V
V _{BE(SAT)}	I _C =10mA, I _B =1.0mA		0.75	V
h _{FE}	V _{CE} =10V, I _C =1.0mA	40		
h _{FE}	V _{CE} =10V, I _C =10mA	50	200	
h _{FE}	V _{CE} =10V, I _C =50mA	45		
h _{FE}	V _{CE} =10V, I _C =100mA	20		
f _T	V _{CE} =10V, I _C =10mA, f=10MHz	20		MHz
C _{ob}	V _{CB} =20V, I _E =0, f=1.0MHz		7.0	pF
C _{ib}	V _{EB} =0.5V, I _C =0, f=1.0MHz		130	pF

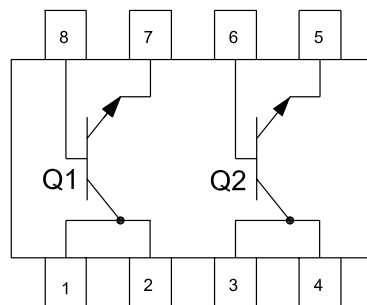
**SURFACE MOUNT
DUAL, ISOLATED NPN HIGH VOLTAGE
SILICON TRANSISTORS**

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	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)