

CZTA96

**SURFACE MOUNT  
EXTREMELY HIGH VOLTAGE  
PNP SILICON TRANSISTOR**



**SOT-223 CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CZTA96 type is a surface mount epoxy molded PNP silicon planar epitaxial transistors designed for extremely high voltage applications.

**MARKING: FULL PART NUMBER**

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

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

**SYMBOL**

$V_{CB0}$	450
$V_{CEO}$	450
$V_{EBO}$	6.0
$I_C$	500
$P_D$	2.0
$T_J, T_{stg}$	-65 to +150
$\theta_{JA}$	62.5

**UNITS**

V
V
V
mA
W
$^\circ\text{C}$
$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_{CBO}$	$V_{CB}=400\text{V}$			100	nA
$I_{EBO}$	$V_{BE}=4.0\text{V}$			100	nA
$BV_{CB0}$	$I_C=100\mu\text{A}$	450	500		V
$BV_{CEO}$	$I_C=1.0\text{mA}$	450	490		V
$BV_{EBO}$	$I_E=10\mu\text{A}$	6.0	9.7		V
$V_{CE(SAT)}$	$I_C=1.0\text{mA}, I_B=0.1\text{mA}$			0.20	V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$			0.30	V
$V_{CE(SAT)}$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		0.15	0.50	V
$V_{BE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$			1.0	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	120	200	
$h_{FE}$	$V_{CE}=10\text{V}, I_C=50\text{mA}$	45			
$h_{FE}$	$V_{CE}=10\text{V}, I_C=100\text{mA}$	25	35		
$f_T$	$V_{CE}=10\text{V}, I_C=10\text{mA}, f=10\text{MHz}$	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

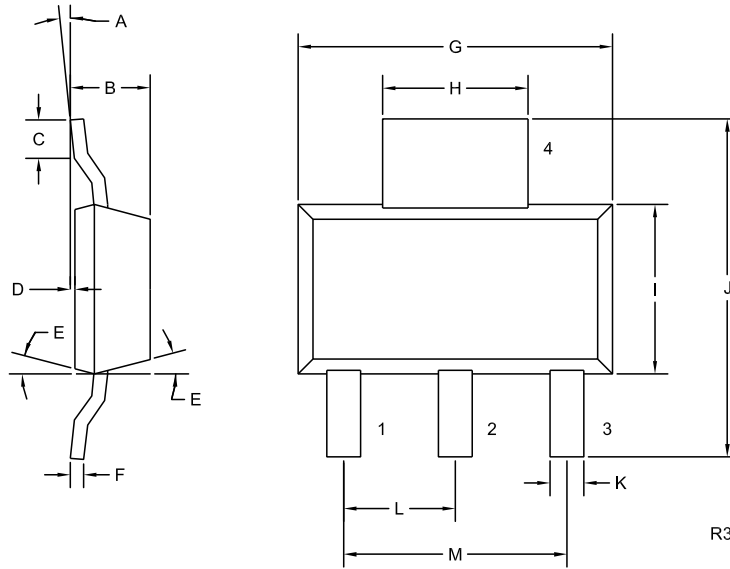
R4 (1-March 2010)

CZTA96

**SURFACE MOUNT  
EXTREMELY HIGH VOLTAGE  
PNP SILICON TRANSISTOR**



**SOT-223 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) Base
- 2) Collector
- 3) Emitter
- 4) Collector

**MARKING:**

**FULL PART NUMBER**

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0°	10°	0°	10°
B	0.059	0.071	1.50	1.80
C	0.018	—	0.45	—
D	0.000	0.004	0.00	0.10
E	15°		15°	
F	0.009	0.014	0.23	0.35
G	0.248	0.264	6.30	6.70
H	0.114	0.122	2.90	3.10
I	0.130	0.146	3.30	3.70
J	0.264	0.287	6.70	7.30
K	0.024	0.033	0.60	0.85
L	0.091		2.30	
M	0.181		4.60	

SOT-223 (REV: R3)

R4 (1-March 2010)