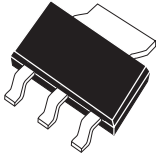


## CZTA44

### NPN SILICON EXTREMELY HIGH VOLTAGE TRANSISTOR



**SOT-223 CASE**

### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CZTA44 type is a surface mount epoxy molded silicon planar epitaxial transistors designed for extremely high voltage applications.

### MAXIMUM RATINGS (T<sub>A</sub>=25°C)

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

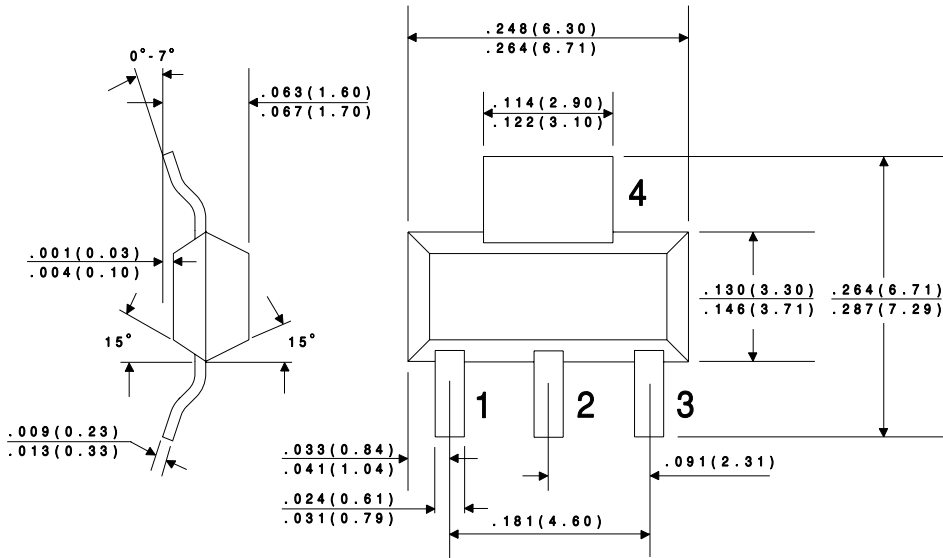
SYMBOL		UNITS
V <sub>CB0</sub>	450	V
V <sub>CEO</sub>	400	V
V <sub>EBO</sub>	6.0	V
I <sub>C</sub>	300	mA
P <sub>D</sub>	2.0	W
T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
θ <sub>JA</sub>	62.5	°C/W

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>CB0</sub>	V <sub>CB</sub> =400V		100	nA
I <sub>CES</sub>	V <sub>CE</sub> =400V		500	nA
I <sub>EBO</sub>	V <sub>BE</sub> =4.0V		100	nA
BV <sub>CB0</sub>	I <sub>C</sub> =100μA	450		V
BV <sub>CES</sub>	I <sub>C</sub> =100μA	450		V
BV <sub>CEO</sub>	I <sub>C</sub> =1.0mA	400		V
BV <sub>EBO</sub>	I <sub>E</sub> =10μA	6.0		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =1.0mA, I <sub>B</sub> =0.1mA		0.40	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1.0mA		0.50	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =50mA, I <sub>B</sub> =5.0mA		0.75	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1.0mA		0.75	V
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =1.0mA	40		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA	50	200	
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA	45		

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$h_{FE}$	$V_{CE}=10V, I_C=100mA$	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

All dimensions in inches (mm).



LEAD CODE:

- 1) BASE
- 2) COLLECTOR
- 3) EMITTER
- 4) COLLECTOR