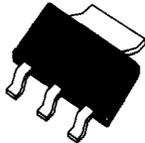


CZTA42 NPN  
CZTA92 PNP

COMPLEMENTARY  
SILICON HIGH VOLTAGE TRANSISTOR



SOT-223 CASE

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CZTA42, CZTA92 types are complementary surface mount epoxy molded silicon planar epitaxial transistors designed for high voltage applications.

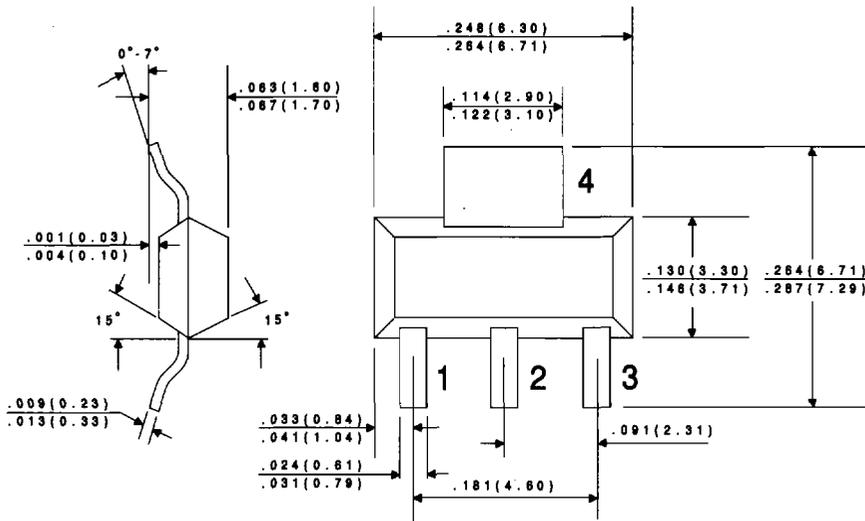
**MAXIMUM RATINGS** ( $T_A=25^{\circ}\text{C}$ )

	SYMBOL	<u>CZTA42</u>	<u>CZTA92</u>	UNITS
Collector-Base Voltage	$V_{CBO}$	300	300	V
Collector-Emitter Voltage	$V_{CEO}$	300	300	V
Emitter-Base Voltage	$V_{EBO}$	6.0	5.0	V
Collector Current	$I_C$		500	mA
Power Dissipation	$P_D$		2.0	W
Operating and Storage				
Junction Temperature	$T_J, T_{stg}$	-65 to +150		$^{\circ}\text{C}$
Thermal Resistance	$\theta_{JA}$	62.5		$^{\circ}\text{C}/\text{W}$

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

SYMBOL	TEST CONDITIONS	<u>CZTA42</u>		<u>CZTA92</u>		UNITS
		MIN	MAX	MIN	MAX	
$I_{CBO}$	$V_{CB}=200\text{V}$		100		250	nA
$I_{EBO}$	$V_{BE}=6.0\text{V}$		100		-	nA
$I_{EBO}$	$V_{BE}=3.0\text{V}$		-		100	nA
$BV_{CBO}$	$I_C=100\mu\text{A}$	300		300		V
$BV_{CEO}$	$I_C=1.0\text{mA}$	300		300		V
$BV_{EBO}$	$I_E=100\mu\text{A}$	6.0		5.0		V
$V_{CE(SAT)}$	$I_C=20\text{mA}, I_B=2.0\text{mA}$		0.5		0.5	V
$V_{BE(SAT)}$	$I_C=20\text{mA}, I_B=2.0\text{mA}$		0.9		0.9	V
$h_{FE}$	$V_{CE}=10\text{V}, I_C=1.0\text{mA}$	25		25		
$h_{FE}$	$V_{CE}=10\text{V}, I_C=10\text{mA}$	40		40		
$h_{FE}$	$V_{CE}=10\text{V}, I_C=30\text{mA}$	40		25		
$f_T$	$V_{CE}=20\text{V}, I_C=10\text{mA}, f=100\text{MHz}$	50		50		MHz
$C_{ob}$	$V_{CB}=20\text{V}, I_E=0, f=1.0\text{MHz}$		3.0		6.0	pF

All dimensions in inches (mm).



LEAD CODE:

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

DATA SHEET

R2