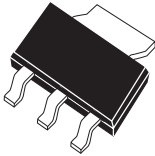


CZT2000

**NPN SILICON
EXTREMELY HIGH VOLTAGE
DARLINGTON TRANSISTOR**



SOT-223 CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CZT2000 type is an NPN Epitaxial Planar Silicon Darlington Transistor manufactured in an epoxy molded surface mount package, designed for applications requiring extremely high voltages and high gain capability.

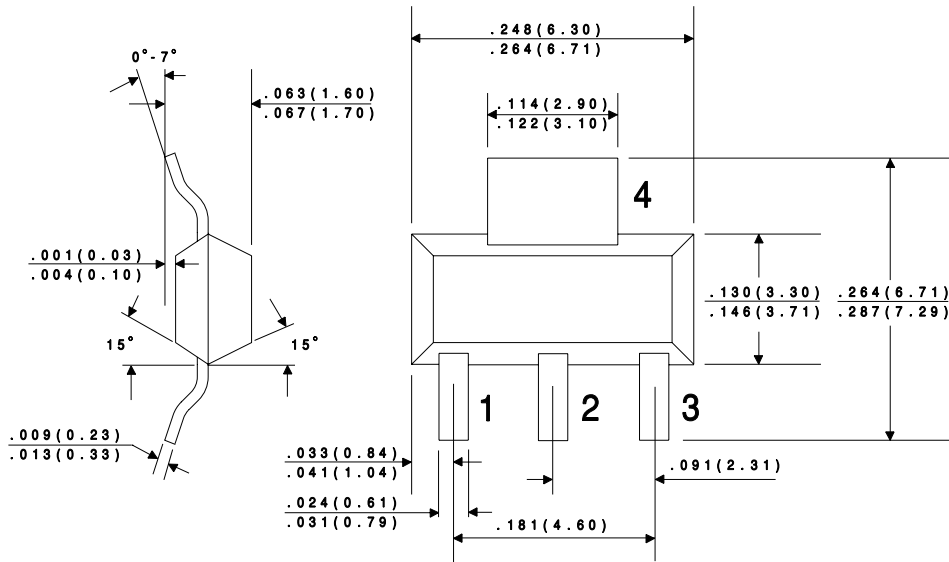
MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	200	V
Collector-Emitter Voltage	V_{CES}	200	V
Emitter-Base Voltage	V_{EBO}	10	V
Collector Current	I_C	600	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	θ_{JA}	62.5	$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	$V_{CB}=180\text{V}$		500	nA
I_{EBO}	$V_{BE}=10\text{V}$		100	nA
BV_{CES}	$I_C=1.0\text{mA}$	200		V
$V_{CE(SAT)}$	$I_C=20\text{mA}, I_B=25\mu\text{A}$		0.9	V
$V_{CE(SAT)}$	$I_C=80\text{mA}, I_B=40\mu\text{A}$		1.1	V
$V_{CE(SAT)}$	$I_C=160\text{mA}, I_B=100\mu\text{A}$		1.2	V
$V_{BE(ON)}$	$V_{CE}=5.0\text{V}, I_C=160\text{mA}$		2.0	V
h_{FE}	$V_{CE}=5.0\text{V}, I_C=100\mu\text{A}$	3,000		
h_{FE}	$V_{CE}=5.0\text{V}, I_C=10\text{mA}$	3,000		
h_{FE}	$V_{CE}=5.0\text{V}, I_C=160\text{mA}$	3,000		

All dimensions in inches (mm).



LEAD CODE:

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