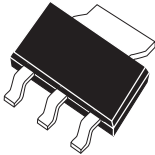


CZT2000

**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°C)

	SYMBOL		UNITS
Collector-Base Voltage	V _{CB0}	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	°C
Thermal Resistance	θ _{JA}	62.5	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =180V		500	nA
I _{EBO}	V _{BE} =10V		100	nA
BV _{CES}	I _C =1.0mA	200		V
V _{CE(SAT)}	I _C =20mA, I _B =25μA		0.9	V
V _{CE(SAT)}	I _C =80mA, I _B =40μA		1.1	V
V _{CE(SAT)}	I _C =160mA, I _B =100μA		1.2	V
V _{BE(ON)}	V _{CE} =5.0V, I _C =160mA		2.0	V
h _{FE}	V _{CE} =5.0V, I _C =100μA	3,000		
h _{FE}	V _{CE} =5.0V, I _C =10mA	3,000		
h _{FE}	V _{CE} =5.0V, I _C =160mA	3,000		

