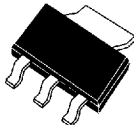




CZT122 NPN
CZT127 PNP

COMPLEMENTARY SILICON
POWER DARLINGTON TRANSISTOR

POWER
223TM



SOT-223 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CZT122, CZT127 types are Complementary Silicon Power Darlington Transistors manufactured in a surface mount package designed for low speed switching and amplifier applications.

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

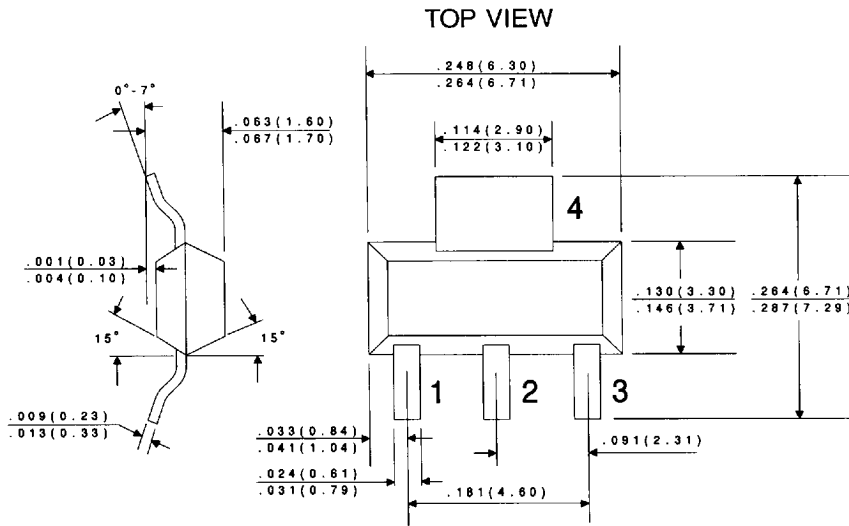
	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	100	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	5.0	A
Peak Collector Current	I_{CM}	8.0	A
Base Current	I_B	120	mA
Power Dissipation	P_D	2.0	W
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	Θ_{JA}	62.5	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CEO}	$V_{CE}=50\text{V}$		500	μA
I_{CBO}	$V_{CB}=100\text{V}$		200	μA
I_{EBO}	$V_{EB}=5.0\text{V}$		2.0	mA
BV_{CEO}	$I_C=30\text{mA}$	100		V
$V_{CE(SAT)}$	$I_C=3.0\text{A}, I_B=12\text{mA}$		2.0	V
$V_{CE(SAT)}$	$I_C=5.0\text{A}, I_B=20\text{mA}$		4.0	V
$V_{BE(ON)}$	$V_{CE}=3.0\text{V}, I_C=3.0\text{A}$		2.5	V
h_{FE}	$V_{CE}=3.0\text{V}, I_C=500\text{mA}$	1000		
h_{FE}	$V_{CE}=3.0\text{V}, I_C=3.0\text{A}$	1000		
f_T	$V_{CE}=4.0\text{V}, I_C=3.0\text{A}, f=1.0\text{MHz}$	4.0		MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz (CZT122)}$		200	pF
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz (CZT127)}$		300	pF

■ 1989963 0001947 082 ■ 296

All dimensions in inches (mm).



LEAD CODE:

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

DATA
SHEET

1989963 0001948 T19

R1