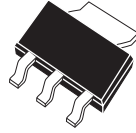


CZT122 NPN
CZT127 PNP

**SURFACE MOUNT
COMPLEMENTARY SILICON
POWER DARLINGTON TRANSISTOR**

**POWER
223**



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.

MARKING CODE: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)

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

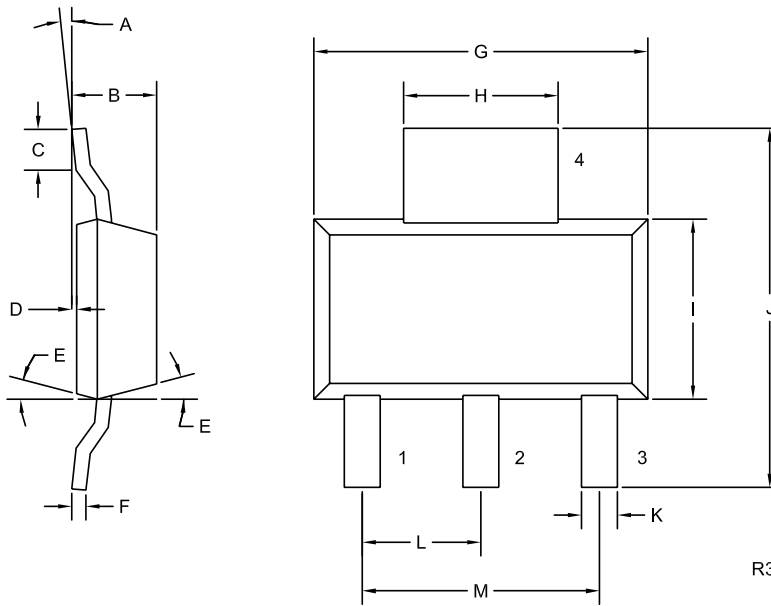
ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CEO}	V _{CE} =50V		500	μA
I _{CBO}	V _{CB} =100V		200	μA
I _{EBO}	V _{EB} =5.0V		2.0	mA
BV _{CEO}	I _C =30mA	100		V
V _{CE(SAT)}	I _C =3.0A, I _B =12mA		2.0	V
V _{CE(SAT)}	I _C =5.0A, I _B =20mA		4.0	V
V _{BE(ON)}	V _{CE} =3.0V, I _C =3.0A		2.5	V
h _{FE}	V _{CE} =3.0V, I _C =500mA	1000		
h _{FE}	V _{CE} =3.0V, I _C =3.0A	1000		
f _T	V _{CE} =4.0V, I _C =3.0A, f=1.0MHz	4.0		MHz
C _{ob}	V _{CB} =10V, I _E =0, f=1.0MHz (CZT122)		200	pF
C _{ob}	V _{CB} =10V, I _E =0, f=1.0MHz (CZT127)		300	pF

R3 (17-June 2004)

**SURFACE MOUNT
COMPLEMENTARY SILICON
POWER DARLINGTON TRANSISTOR**

SOT-223 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

**MARKING CODE:
FULL PART NUMBER**

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0°	10°	0°	10°
B	0.059	0.071	1.50	1.80
C	0.018	---	0.45	---
D	0.000	0.004	0.00	0.10
E	15°		15°	
F	0.009	0.014	0.23	0.35
G	0.248	0.264	6.30	6.70
H	0.114	0.122	2.90	3.10
I	0.130	0.146	3.30	3.70
J	0.264	0.287	6.70	7.30
K	0.024	0.033	0.60	0.85
L	0.091		2.30	
M	0.181		4.60	

SOT-223 (REV: R3)

R3 (17-June 2004)