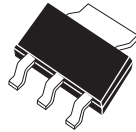


CZT2955 PNP
CZT3055 NPN

2.0W SURFACE MOUNT
COMPLEMENTARY SILICON
POWER TRANSISTOR

POWER
223



SOT-223 CASE

CentralTM

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CZT2955 and CZT3055 types are surface mount epoxy molded complementary silicon transistors manufactured by the epitaxial base process, designed for surface mounted power amplifier applications up to 6.0 amps.

MARKING CODE: FULL PART NUMBER

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

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CER}	70	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	7.0	V
Collector Current	I_C	6.0	A
Base Current	I_B	3.0	A
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	$^\circ\text{C/W}$

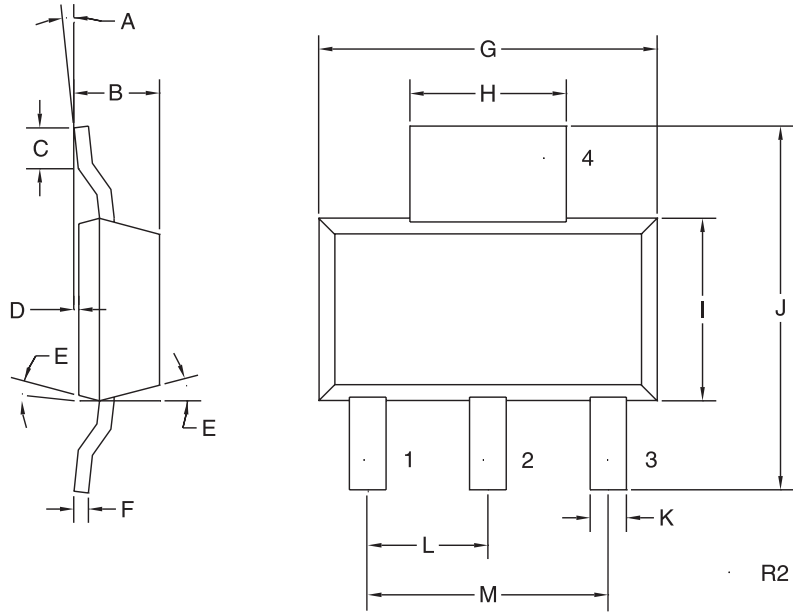
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CEO}	$V_{CE}=30\text{V}$		700	μA
I_{CEV}	$V_{CE}=100\text{V}, V_{EB}=1.5\text{V}$		1.0	mA
I_{EBO}	$V_{EB}=7.0\text{V}$		5.0	mA
BV_{CER}	$I_C=30\text{mA}, R_{BE}=100\Omega$	70		V
BV_{CEO}	$I_C=30\text{mA}$	60		V
* $V_{CE(SAT)}$	$I_C=4.0\text{A}, I_B=400\text{mA}$		1.1	V
* $V_{BE(ON)}$	$V_{CE}=4.0\text{V}, I_C=4.0\text{A}$		1.5	V
* h_{FE}	$V_{CE}=4.0\text{V}, I_C=4.0\text{A}$	20	70	
* h_{FE}	$V_{CE}=4.0\text{V}, I_C=6.0\text{A}$	5.0		
f_T	$V_{CE}=10\text{V}, I_C=500\text{mA}, f=1.0\text{MHz}$	2.5		MHZ

* Pulsed, 2% D.C.

R2 (26-September 2002)

SOT-223 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

**MARKING CODE:
FULL PART NUMBER**

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0°	7°	0°	7°
B	0.063	0.067	1.60	1.70
C	0.022		0.55	
D	0.001	0.004	0.03	0.10
E	15°		15°	
F	0.009	0.013	0.23	0.33
G	0.248	0.264	6.30	6.71
H	0.114	0.122	2.90	3.10
I	0.130	0.146	3.30	3.71
J	0.264	0.287	6.71	7.29
K	0.024	0.031	0.61	0.79
L	0.091		2.31	
M	0.181		4.60	

SOT-223 (REV: R2)

R2 (26-September 2002)