

CZT2955 PNP  
CZT3055 NPN

**SURFACE MOUNT  
COMPLEMENTARY  
SILICON POWER TRANSISTORS**



[www.centrasemi.com](http://www.centrasemi.com)

**POWER  
223™**



**SOT-223 CASE**

**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: 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
Continuous Collector Current	$I_C$	6.0	A
Continuous 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	$\Theta_{JA}$	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	$\mu\text{A}$
$I_{CEV}$	$V_{CE}=100\text{V}, V_{EB}=1.5\text{V}$		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

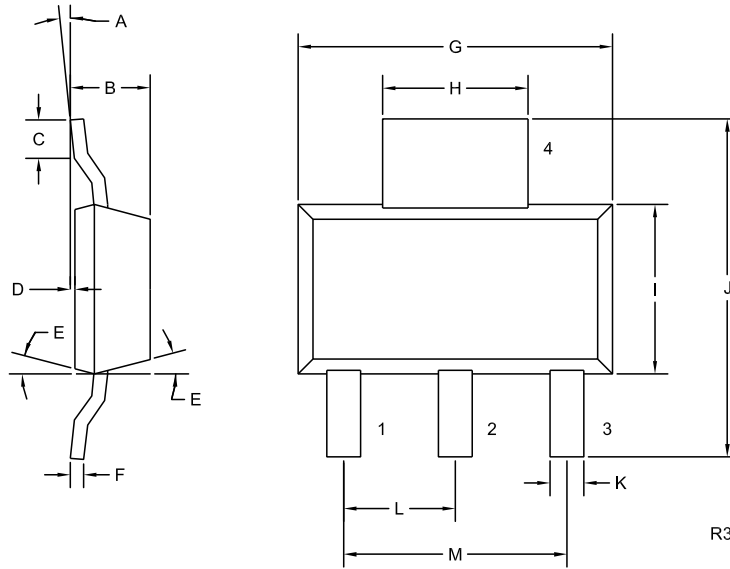
R4 (1-March 2010)

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**SOT-223 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) Base
- 2) Collector
- 3) Emitter
- 4) Collector

**MARKING:**

**FULL PART NUMBER**

SYMBOL	DIMENSIONS			
	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)

R4 (1-March 2010)