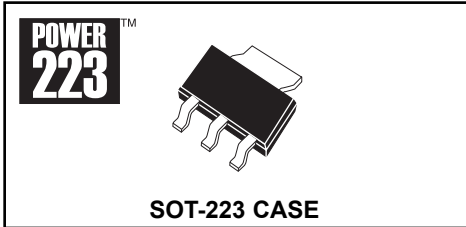


CZTUX87
SURFACE MOUNT
HIGH VOLTAGE
NPN SILICON POWER TRANSISTOR



CentralTM

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CZTUX87 type is a NPN Silicon Power Transistor epoxy molded in a surface mount package, designed for high voltage switching applications.

MARKING CODE: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)

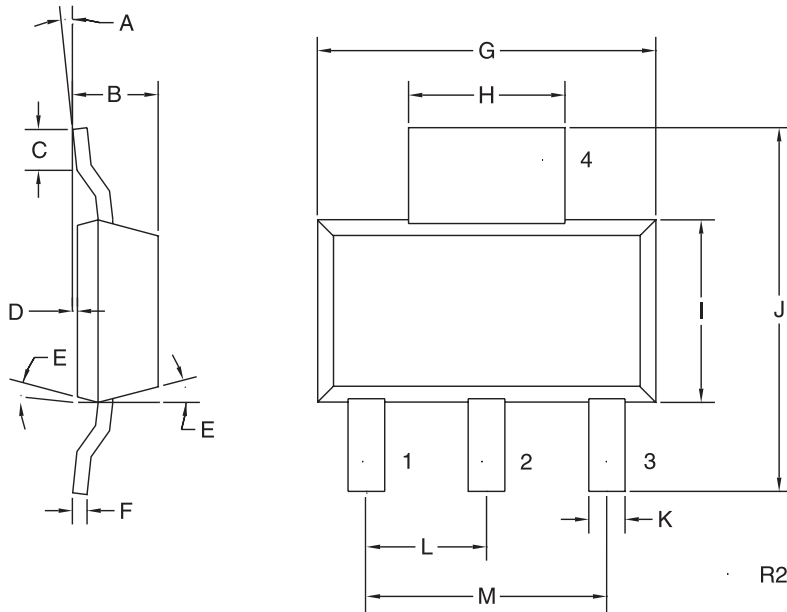
	SYMBOL		UNITS
Collector-Emitter Voltage	V _{CEV}	900	V
Collector-Emitter Voltage	V _{CEO}	450	V
Emitter-Base Voltage	V _{EBO}	5.0	V
Collector Current	I _C	0.5	A
Peak Collector Current	I _{CM}	1.0	A
Base Current	I _B	1.0	A
Power Dissipation	P _D	2.0	W
Operating and Storage Junction Temperature	T _J , 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	TYP	MAX	UNITS
I _{CEV}	V _{CE} =900V, V _{BE} =1.5V			100	μA
I _{CEV}	V _{CE} =900V, V _{BE} =1.5V, T _A =125°C			1.0	mA
I _{EBO}	V _{EB} =5.0V			1.0	mA
BV _{CEO}	I _C =30mA	450			V
V _{CE(SAT)}	I _C =100mA, I _B =10mA			0.8	V
V _{CE(SAT)}	I _C =200mA, I _B =20mA			1.0	V
V _{BE(SAT)}	I _C =200mA, I _B =20mA			1.0	V
h _{FE}	V _{CE} =5.0V, I _C =40mA	12			
f _T	V _{CE} =10V, I _C =50mA, f=1.0MHz		20		MHz
t _s	V _{CC} =250V, I _C =200mA, I _{B1} =40mA, I _{B2} =80mA		4.5		μs
t _f	V _{CC} =250V, I _C =200mA, I _{B1} =40mA, I _{B2} =80mA		0.5		μs

R1 (14-November 2002)

SOT-223 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

MARKING CODE:

FULL PART NUMBER

SYMBOL	DIMENSIONS		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)

R1 (14-November 2002)