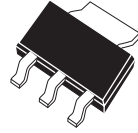


CZTA44

NPN SILICON, EXTREMELY
HIGH VOLTAGE TRANSISTOR



SOT-223 CASE

CentralTM Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CZTA44 type is a surface mount epoxy molded silicon planar epitaxial transistor designed for extremely high voltage applications.

MARKING CODE: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)

Collector-Base Voltage
 Collector-Emitter Voltage
 Emitter-Base Voltage
 Collector Current
 Power Dissipation
 Operating and Storage
 Junction Temperature
 Thermal Resistance

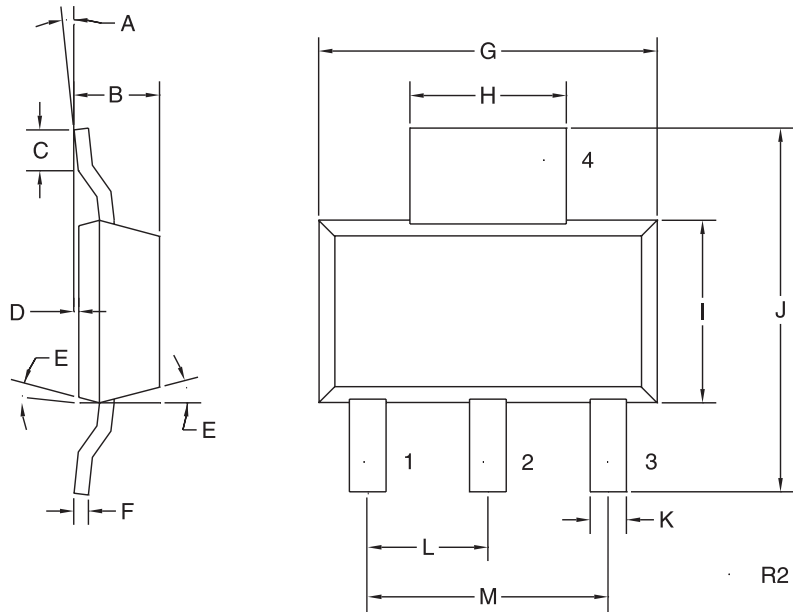
SYMBOL		UNITS
V _{CB0}	450	V
V _{CEO}	400	V
V _{EBO}	6.0	V
I _C	300	mA
P _D	2.0	W
T _J , T _{stg}	-65 to +150	°C
θ _{JA}	62.5	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CB0}	V _{CB} =400V		100	nA
I _{CES}	V _{CE} =400V		500	nA
I _{EBO}	V _{BE} =4.0V		100	nA
BV _{CB0}	I _C =100μA	450		V
BV _{CES}	I _C =100μA	450		V
BV _{CEO}	I _C =1.0mA	400		V
BV _{EBO}	I _E =10μA	6.0		V
V _{CE(SAT)}	I _C =1.0mA, I _B =0.1mA		0.40	V
V _{CE(SAT)}	I _C =10mA, I _B =1.0mA		0.50	V
V _{CE(SAT)}	I _C =50mA, I _B =5.0mA		0.75	V
V _{BE(SAT)}	I _C =10mA, I _B =1.0mA		0.75	V
h _{FE}	V _{CE} =10V, I _C =1.0mA	40		
h _{FE}	V _{CE} =10V, I _C =10mA	50	200	
h _{FE}	V _{CE} =10V, I _C =50mA	45		
h _{FE}	V _{CE} =10V, I _C =100mA	20		
f _T	V _{CE} =10V, I _C =10mA, f=10MHz	20		MHz
C _{ob}	V _{CB} =20V, I _E =0, f=1.0MHz		7.0	pF
C _{ib}	V _{EB} =0.5V, I _C =0, f=1.0MHz		130	pF

R3 (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		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)

R3 (26-September 2002)