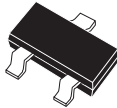


CMPTA44

**NPN SILICON EXTREMELY
HIGH VOLTAGE TRANSISTOR**



SOT-23 CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPTA44 type is a surface mount epoxy molded silicon planar epitaxial transistors designed for extremely high voltage applications.

Marking Code is C3Z.

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

V_{CBO} 450
 V_{CEO} 400
 V_{EBO} 6.0
 I_C 300
 P_D 350
 T_J, T_{stg} -65 to +150
 Θ_{JA} 357

UNITS

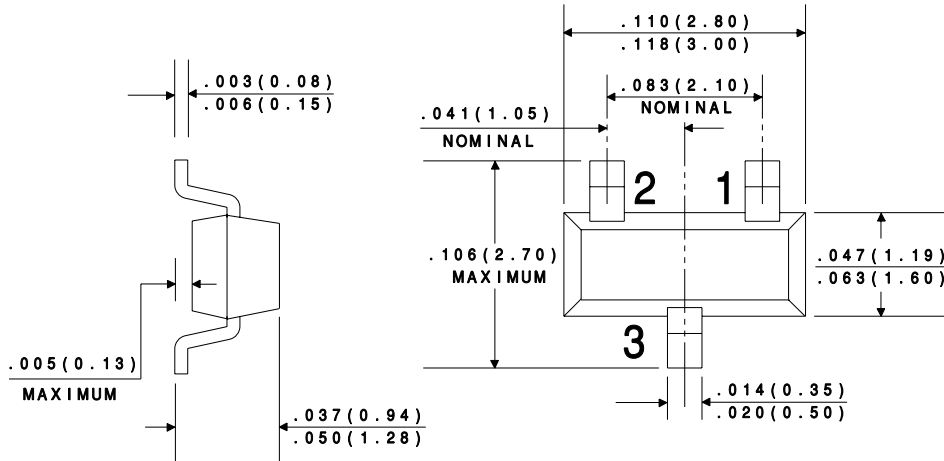
V
 V
 V
 mA
 mW
 °C
 °C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =400V		100	nA
I _{CES}	V _{CE} =400V		500	nA
I _{EBO}	V _{BE} =4.0V		100	nA
BV _{CBO}	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	

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
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

All dimensions in inches (mm).



LEAD CODE:

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