

CXTA44
SURFACE MOUNT
HIGH VOLTAGE
NPN SILICON TRANSISTOR

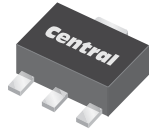


www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CXTA44 type is a surface mount epoxy molded silicon planar epitaxial transistors designed for extremely high voltage applications.

MARKING: FULL PART NUMBER



SOT-89 CASE

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

Collector-Base Voltage	V_{CBO}	450	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	6.0	V
Continuous Collector Current	I_C	300	mA
Power Dissipation	P_D	1.2	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +175	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	125	$^\circ\text{C/W}$

SYMBOL

UNITS

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	$V_{CB}=400\text{V}$		100	nA
I_{CES}	$V_{CE}=400\text{V}$		500	nA
I_{EBO}	$V_{BE}=4.0\text{V}$		100	nA
BV_{CBO}	$I_C=100\mu\text{A}$	450		V
BV_{CES}	$I_C=100\mu\text{A}$	450		V
BV_{CEO}	$I_C=1.0\text{mA}$	400		V
BV_{EBO}	$I_E=10\mu\text{A}$	6.0		V
$V_{CE(SAT)}$	$I_C=1.0\text{mA}, I_B=0.1\text{mA}$		0.40	V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.50	V
$V_{CE(SAT)}$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		0.75	V
$V_{BE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.75	V

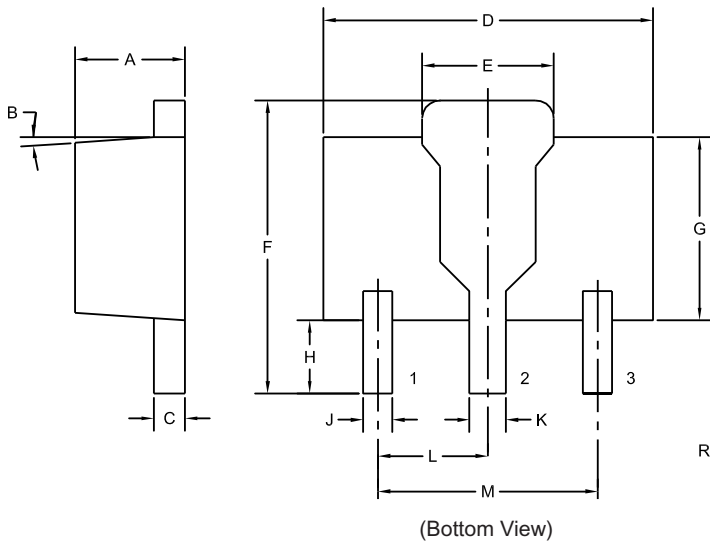
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ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^\circ\text{C}$)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
h_{FE}	$V_{CE}=10\text{V}, I_C=1.0\text{mA}$	40		
h_{FE}	$V_{CE}=10\text{V}, I_C=10\text{mA}$	50	200	
h_{FE}	$V_{CE}=10\text{V}, I_C=50\text{mA}$	45		
h_{FE}	$V_{CE}=10\text{V}, I_C=100\text{mA}$	20		
f_T	$V_{CE}=10\text{V}, I_C=10\text{mA}, f=10\text{MHz}$	20		MHz
C_{ob}	$V_{CB}=20\text{V}, I_E=0, f=1.0\text{MHz}$		7.0	pF
C_{ib}	$V_{EB}=0.5\text{V}, I_C=0, f=1.0\text{MHz}$		130	pF

SOT-89 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.067	1.40	1.70
B	4°		4°	
C	0.014	0.018	0.35	0.46
D	0.173	0.185	4.40	4.70
E	0.064	0.074	1.62	1.87
F	0.146	0.177	3.70	4.50
G	0.090	0.106	2.29	2.70
H	0.028	0.051	0.70	1.30
J	0.014	0.019	0.36	0.48
K	0.017	0.023	0.44	0.58
L	0.059		1.50	
M	0.118		3.00	

SOT-89 (REV: R4)

LEAD CODE:

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

MARKING:

FULL PART NUMBER

R6 (23-February 2010)