

CXTA44

SURFACE MOUNT
NPN SILICON
HIGH VOLTAGE TRANSISTOR



SOT-89 CASE

DESCRIPTION:

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

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V _{CB0}	450	V
Collector-Emitter Voltage	V _{CEO}	400	V
Emitter-Base Voltage	V _{EBO}	6.0	V
Collector Current	I _C	300	mA
Power Dissipation	P _D	1.2	W
Operating and Storage			
Junction Temperature	T _J ,T _{stg}	-65 to +150	°C
Thermal Resistance	θ _{JA}	104	°C/W

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

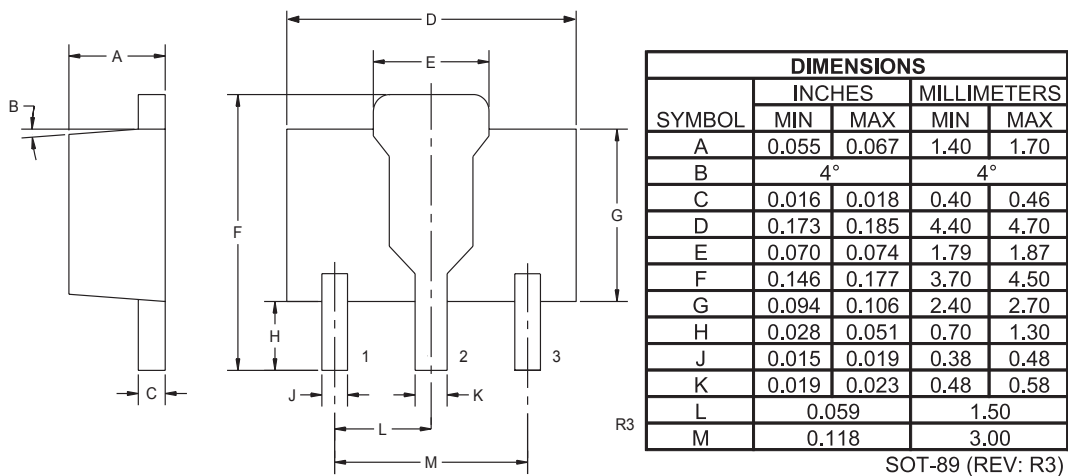
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CB0}	V _{CB} =400V		100	nA
I _{CES}	V _{CE} =400V		500	nA
I _{EBO}	V _{BE} =4.0V		100	nA
BV _{CB0}	I _C =100μA	450		V
BV _{CES}	I _C =100μA	450		V
BV _{CEO}	I _C =1.0mA	400		V
BV _{EBO}	I _E =10μA	6.0		V
V _{CE} (SAT)	I _C =1.0mA, I _B =0.1mA		0.40	V
V _{CE} (SAT)	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

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ELECTRICAL CHARACTERISTICS: Continued

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
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

SOT-89 CASE - MECHANICAL OUTLINE



LEAD CODE:

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