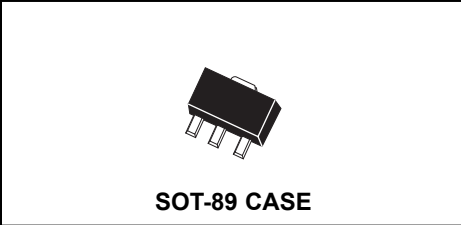


**CXTA42 NPN  
CXTA92 PNP**

**SURFACE MOUNT  
SILICON HIGH VOLTAGE TRANSISTOR**



# Central<sup>TM</sup>

## Semiconductor Corp.

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CXTA42, CXTA92 types are complementary surface mount epoxy molded silicon planar epitaxial transistors designed for high voltage applications.

**MARKING CODE: FULL PART NUMBER**

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

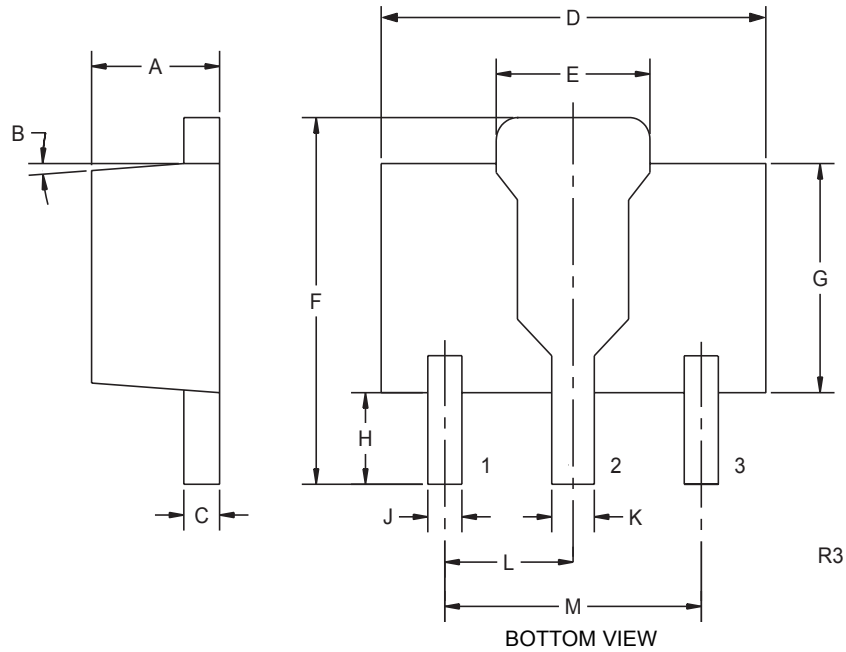
	<b>SYMBOL</b>	<b>CXTA42</b>	<b>CXTA92</b>	<b>UNITS</b>
Collector-Base Voltage	$V_{CB0}$	300	300	V
Collector-Emitter Voltage	$V_{CEO}$	300	300	V
Emitter-Base Voltage	$V_{EBO}$	6.0	5.0	V
Collector Current	$I_C$		500	mA
Power Dissipation	$P_D$		1.2	W
Operating and Storage				
Junction Temperature	$T_J, T_{stg}$		-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$		104	$^\circ\text{C/W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>CXTA42</b>		<b>CXTA92</b>		<b>UNITS</b>
		<b>MIN</b>	<b>MAX</b>	<b>MIN</b>	<b>MAX</b>	
$I_{CBO}$	$V_{CB}=200\text{V}$		100		250	nA
$I_{EB0}$	$V_{BE}=6.0\text{V}$		100		-	nA
$I_{EBO}$	$V_{BE}=3.0\text{V}$		-		100	nA
$BV_{CBO}$	$I_C=100\text{mA}$	300		300		V
$BV_{CEO}$	$I_C=1.0\text{mA}$	300		300		V
$BV_{EBO}$	$I_E=100\mu\text{A}$	6.0		5.0		V
$V_{CE(SAT)}$	$I_C=20\text{mA}, I_B=2.0\text{mA}$		0.5		0.5	V
$V_{BE(SAT)}$	$I_C=20\text{mA}, I_B=2.0\text{mA}$		0.9		0.9	V
$h_{FE}$	$V_{CE}=10\text{V}, I_C=1.0\text{mA}$	25		25		
$h_{FE}$	$V_{CE}=10\text{V}, I_C=10\text{mA}$	40		40		
$h_{FE}$	$V_{CE}=10\text{V}, I_C=30\text{mA}$	40		25		
$f_T$	$V_{CE}=20\text{V}, I_C=10\text{mA}, f=100\text{MHz}$	50		50		MHz
$C_{ob}$	$V_{CB}=20\text{V}, I_E=0, f=1.0\text{MHz}$		3.0		6.0	pF

**SURFACE MOUNT  
SILICON HIGH VOLTAGE TRANSISTOR**

**SOT-89 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

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

**MARKING CODE:  
FULL PART NUMBER**

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.067	1.40	1.70
B	4°		4°	
C	0.016	0.018	0.40	0.46
D	0.173	0.185	4.40	4.70
E	0.070	0.074	1.79	1.87
F	0.146	0.177	3.70	4.50
G	0.094	0.106	2.40	2.70
H	0.028	0.051	0.70	1.30
J	0.015	0.019	0.38	0.48
K	0.019	0.023	0.48	0.58
L	0.059		1.50	
M	0.118		3.00	

SOT-89 (REV: R3)

R4 (14-November 2002)