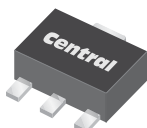


CXT3150

**SURFACE MOUNT
NPN SILICON POWER TRANSISTOR**

**POWER
89**



SOT-89 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CXT3150 type is a NPN Silicon Power Transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for high current, high gain, fast switching applications.

MARKING: FULL PART NUMBER

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

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

SYMBOL

V_{CBO} 50
 V_{CEO} 25
 V_{EBO} 7.0
 I_C 5.0
 I_B 1.0
 P_D 1.2
 T_J, T_{stg} -65 to +150
 Θ_{JA} 104

UNITS

V
V
V
A
A
W
 $^\circ\text{C}$
 $^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{CBO}	$V_{CB}=50\text{V}$			1.0	μA
I_{EBO}	$V_{EB}=7.0\text{V}$			1.0	μA
BV_{CEO}	$I_C=10\text{mA}$	25			V
$V_{CE(SAT)}$	$I_C=3.0\text{A}, I_B=150\text{mA}$			0.5	V
$V_{CE(SAT)}$	$I_C=4.0\text{A}, I_B=200\text{mA}$			0.6	V
$V_{BE(SAT)}$	$I_C=3.0\text{A}, I_B=150\text{mA}$			1.10	V
$V_{BE(SAT)}$	$I_C=4.0\text{A}, I_B=200\text{mA}$			1.40	V
h_{FE}	$V_{BE}=2.0\text{V}, I_C=500\text{mA}$	250		550	
h_{FE}	$V_{CE}=2.0\text{V}, I_C=2.0\text{A}$	150			
h_{FE}	$V_{CE}=2.0\text{V}, I_C=5.0\text{A}$	50			
f_T	$V_{CE}=6.0\text{V}, I_C=50\text{mA}, f=200\text{MHz}$		150		MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$			50	pF

R6 (23-February 2010)

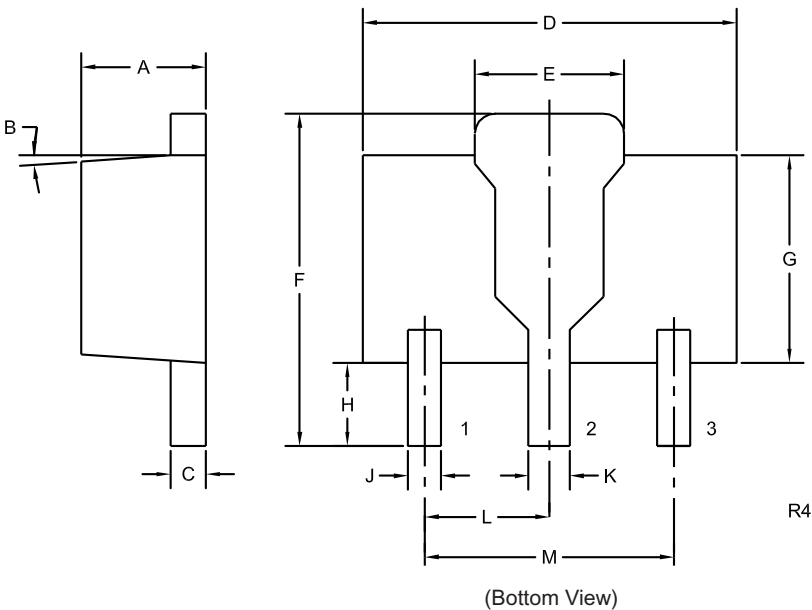
CXT3150

SURFACE MOUNT

NPN SILICON POWER TRANSISTOR



SOT-89 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

MARKING:

FULL PART NUMBER

DIMENSIONS				
SYMBOL	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)

R6 (23-February 2010)