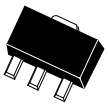
CXT7090L

SURFACE MOUNT
LOW $V_{CE(SAT)}$
PNP POWER TRANSISTOR

POWER 89™



SOT-89 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CXT7090L is a Low $V_{CE(SAT)}$ PNP Transistor in a Power SOT-89 surface mount package, designed for DC-DC converters for mobile systems and LAN cards, motor control, power management and strobe flash units.

Marking code is **CXT7090L**.

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Continuous Collector Current	I_C	3.0	A
Peak Pulse Current	I_{CM}	6.0	A
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	TYP	MAX	UNITS
I_{CBO}	V_{CB}=30V			100	nA
I_{CBO}	V_{CB}=30V, T_A=100°C			10	µA
I_{EBO}	V_{EB}=4.0V			100	nA
BV_{CBO}	I_C=100µA	50			V
BV_{CEO}	I_C=10mA	40			V
BV_{EBO}	I_E=100µA	5.0			V
$V_{CE(SAT)}$	I_C=500mA, I_B=5.0mA		100	250	mV
$V_{CE(SAT)}$	I_C=1.0A, I_B=10mA		175	450	mV
$V_{CE(SAT)}$	I_C=2.0A, I_B=50mA		250	750	mV
$V_{BE(SAT)}$	I_C=1.0A, I_B=10mA		0.8	1.0	V
h_{FE}	V_{CE}=2.0V, I_C=10mA	300		800	
h_{FE}	V_{CE}=2.0V, I_C=500mA	250			
h_{FE}	V_{CE}=2.0V, I_C=1.0A	200			
h_{FE}	V_{CE}=2.0V, I_C=2.0A	150			
f_T	V_{CE}=5V, I_C=50mA, f=50MHz	100			MHz

R0 (07-January 2002)

Central™
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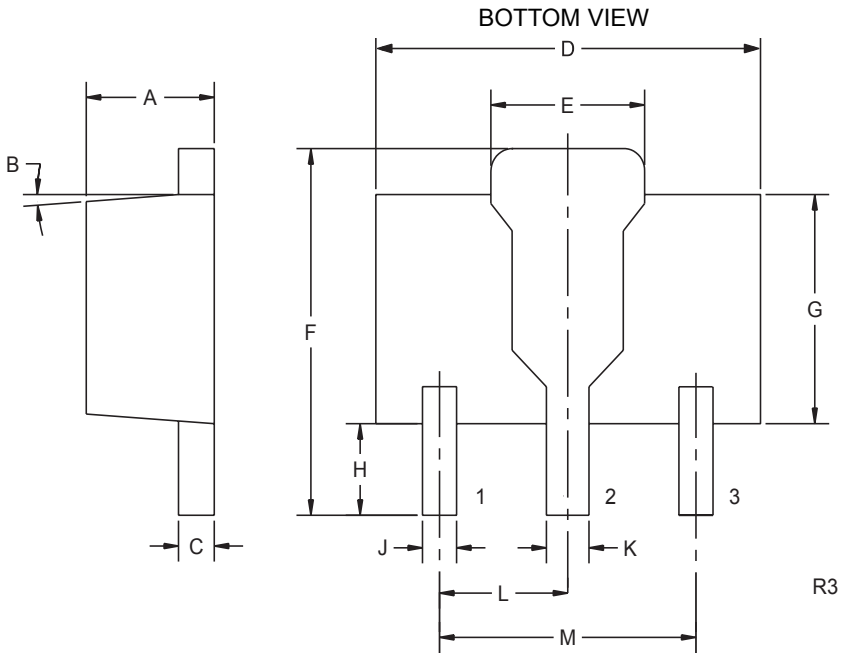
CXT7090L

SURFACE MOUNT
LOW $V_{CE(SAT)}$
PNP POWER TRANSISTOR

SOT-89 CASE - MECHANICAL OUTLINE



LEAD CODE:
1) Emitter
2) Collector
3) Base

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)

R0 (07-January 2002)