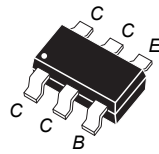


CMXT7090L

**SURFACE MOUNT  
LOW V<sub>CE</sub> SAT  
PNP POWER TRANSISTOR**



**SOT-26 CASE**

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMXT7090L is a Low V<sub>CE</sub> (SAT) PNP Transistor in a six lead Power SOT-26 surface mount package, designed for LAN cards, motor control, power management, strobe flash units and DC-DC converters for mobile systems.

**Marking code is X709L.**

**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C)

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

SYMBOL		UNITS
V <sub>CB0</sub>	50	V
V <sub>CEO</sub>	40	V
V <sub>EBO</sub>	5.0	V
I <sub>C</sub>	3.0	A
I <sub>CM</sub>	6.0	A
P <sub>D</sub>	350	mW
T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
θ <sub>JA</sub>	357	°C/W

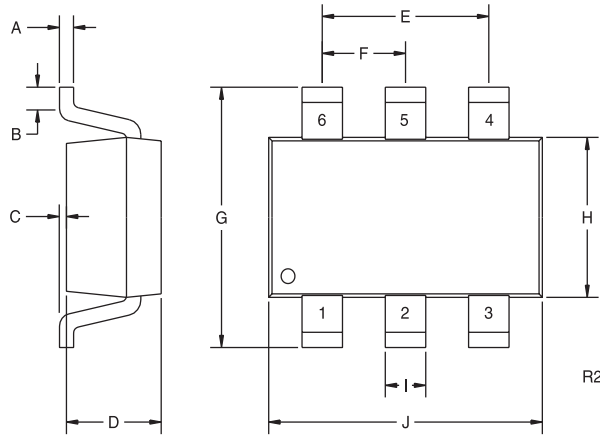
**ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>CB0</sub>	V <sub>CB</sub> =30V			100	nA
I <sub>CB0</sub>	V <sub>CB</sub> =30V, T <sub>A</sub> =100°C			10	µA
I <sub>EBO</sub>	V <sub>EB</sub> =4.0V			100	nA
BV <sub>CB0</sub>	I <sub>C</sub> =100µA	50			V
BV <sub>CEO</sub>	I <sub>C</sub> =10mA	40			V
BV <sub>EBO</sub>	I <sub>E</sub> =100µA	5.0			V
V <sub>CE</sub> (SAT)	I <sub>C</sub> =500mA, I <sub>B</sub> =5.0mA		100	250	mV
V <sub>CE</sub> (SAT)	I <sub>C</sub> =1.0A, I <sub>B</sub> =10mA		175	450	mV
V <sub>CE</sub> (SAT)	I <sub>C</sub> =2.0A, I <sub>B</sub> =50mA		250	750	mV
V <sub>BE</sub> (SAT)	I <sub>C</sub> =1.0A, I <sub>B</sub> =10mA		0.8	1.0	V
h <sub>FE</sub>	V <sub>CE</sub> =2.0V, I <sub>C</sub> =10mA	300		800	
h <sub>FE</sub>	V <sub>CE</sub> =2.0V, I <sub>C</sub> =500mA	250			
h <sub>FE</sub>	V <sub>CE</sub> =2.0V, I <sub>C</sub> =1.0A	200			
h <sub>FE</sub>	V <sub>CE</sub> =2.0V, I <sub>C</sub> =2.0A	150			
f <sub>T</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =50mA, f=50MHz	100			MHz

R0 ( 03-January 2002)

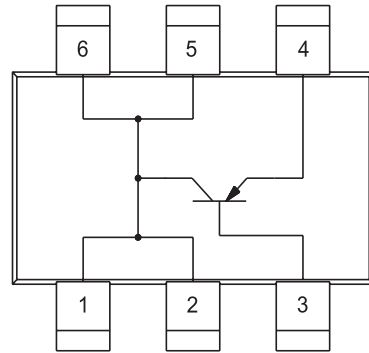
**SURFACE MOUNT  
LOW VCE SAT  
PNP POWER TRANSISTOR**

**SOT-26 CASE - MECHANICAL OUTLINE**



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.11	0.19
B	0.016	-	0.40	-
C	-	0.004	-	0.10
D	0.039	0.047	1.00	1.20
E	0.074	0.075	1.88	1.92
F	0.037	0.038	0.93	0.97
G	0.102	0.118	2.60	3.00
H	0.059	0.067	1.50	1.70
I	0.016		0.41	
J	0.110	0.118	2.80	3.00

SOT-26 (REV: R2)



**LEAD CODE:**

- 1) Collector
- 2) Collector
- 3) Base
- 4) Emitter
- 5) Collector
- 6) Collector

Pins 1, 2, 5 and 6 are common.