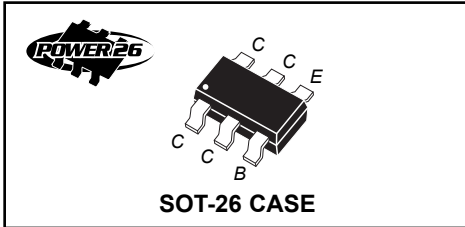


**CMXT7090L**  
**SURFACE MOUNT**  
**LOW V<sub>CE</sub> SAT**  
**PNP SILICON POWER TRANSISTOR**



# 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: X709L**

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

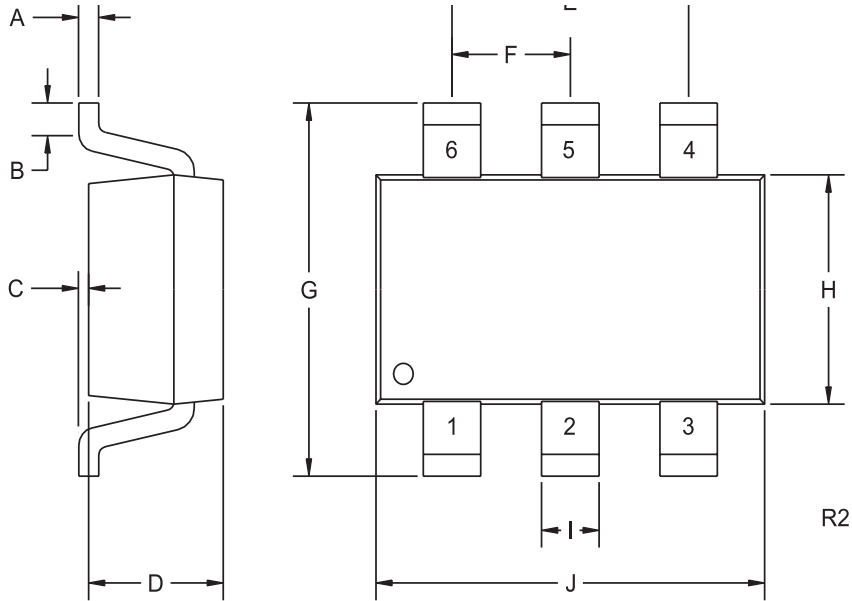
	<b>SYMBOL</b>		<b>UNITS</b>
Collector-Base Voltage	V <sub>CBO</sub>	50	V
Collector-Emitter Voltage	V <sub>CEO</sub>	40	V
Emitter-Base Voltage	V <sub>EBO</sub>	5.0	V
Continuous Collector Current	I <sub>C</sub>	3.0	A
Peak Pulse Current	I <sub>CM</sub>	6.0	A
Power Dissipation	P <sub>D</sub>	350	mW
Operating and Storage			
Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	θ <sub>JA</sub>	357	°C/W

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
I <sub>CBO</sub>	V <sub>CB</sub> =30V			100	nA
I <sub>CBO</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>CBO</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(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =5.0mA		100	250	mV
V <sub>CE(SAT)</sub>	I <sub>C</sub> =1.0A, I <sub>B</sub> =10mA		175	450	mV
V <sub>CE(SAT)</sub>	I <sub>C</sub> =2.0A, I <sub>B</sub> =50mA		250	750	mV
V <sub>BE(SAT)</sub>	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

R1 (18-November 2002)

**SOT-26 CASE - MECHANICAL OUTLINE**

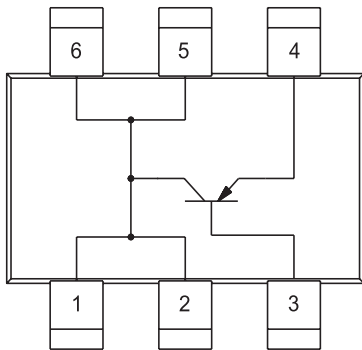


**LEAD CODE:**

- 1) COLLECTOR
- 2) COLLECTOR
- 3) BASE
- 4) EMITTER
- 5) COLLECTOR
- 6) COLLECTOR

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)



**MARKING CODE: X709L**

Pins 1, 2, 5 and 6 are common.

R1 (18-November 2002)