



**FUKUCOM COMPANY LTD.**

**福 靈 有 限 公 司**

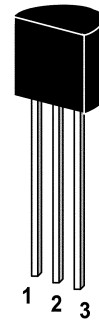
FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

## ST BC212L

**PNP Silicon Epitaxial Planar Transistor**  
for General Purpose Amplifier

On special request, these transistors can be  
manufactured in different pin configurations.

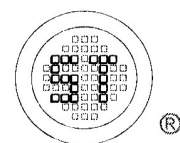


1. Emitter 2. Collector 3. Base

TO-92 Plastic Package  
Weight approx. 0.19g

### Absolute Maximum Ratings ( $T_a=25^\circ\text{C}$ )

	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	60	V
Collector Emitter Voltage	$-V_{CEO}$	50	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	300	mA
Power Dissipation	$P_{tot}$	625	mW
Derate above $25^\circ\text{C}$		5.0	mW/ $^\circ\text{C}$
Storage Temperature Range	$T_J, T_S$	-55 to +150	$^\circ\text{C}$



**SEMTECH**

Dated : 07/12/2002



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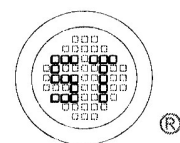
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### Characteristics at $T_{amb}=25^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Small Signal Current Gain at $-V_{CE}=5\text{V}$ , $-I_C=2\text{mA}$ , $f=1\text{kHz}$	$h_{fe}$	60	-	-	-
DC Current Gain at $-V_{CE}=5\text{V}$ , $-I_C=10\mu\text{A}$	$h_{FE}$	40	-	-	-
at $-V_{CE}=5\text{V}$ , $-I_C=2\text{mA}$	$h_{FE}$	60	-	300	-
Collector Base Breakdown Voltage at $-I_C=10\mu\text{A}$	$-V_{(BR)CBO}$	60	-	-	V
Collector Emitter Breakdown Voltage at $-I_C=2\text{mA}$	$-V_{(BR)CEO}$	50	-	-	V
Emitter Base Breakdown Voltage at $-I_E=10\mu\text{A}$	$-V_{(BR)EBO}$	5	-	-	V
Collector Cutoff Current at $-V_{CB}=30\text{V}$	$-I_{CBO}$	-	-	15	nA
Emitter Cutoff Current at $-V_{EB}=4\text{V}$	$-I_{EBO}$	-	-	15	nA
Collector Saturation Voltage at $-I_C=100\text{mA}$ , $-I_B=5\text{mA}$	$-V_{CEsat}$	-	-	600	mV
Base Saturation Voltage at $-I_C=100\text{mA}$ , $-I_B=5\text{mA}$	$-V_{BEsat}$	-	-	1100	mV
Base Emitter On Voltage at $-V_{CE}=5\text{V}$ , $-I_C=2\text{mA}$	$-V_{BE(on)}$	600	-	720	mV
Gain-Bandwidth Product at $-V_{CE}=5\text{V}$ , $-I_C=10\text{mA}$ , $f=100\text{MHz}$	$f_T$	200	-	-	MHz
Output Capacitance at $-V_{CB}=10\text{V}$ , $f=1\text{MHz}$	$C_{CBO}$	-	-	10	pF
Noise Figure at $-V_{CE}=5\text{V}$ , $-I_C=200\mu\text{A}$ , $R_G=2\text{k}\Omega$ , $f=1\text{kHz}$ , $\Delta f=200\text{Hz}$	NF	-	-	10	dB
Thermal Resistance, Junction to Case	$R_{\theta JC}$	-	-	83.3	$^{\circ}\text{C/W}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	-	-	200	$^{\circ}\text{C/W}$



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