

ST 2SC2002

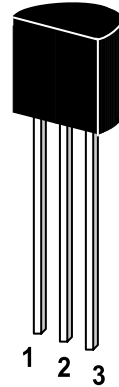
www.DataSheet4U.com

NPN Silicon Epitaxial Planar Transistor

for use in driver stage of high voltage audio equipments.

The transistor is subdivided into three groups, M, L and K, according to its DC current gain.

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

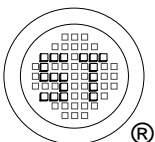


1. Emitter 2. Collector 3. Base

TO-92 Plastic Package
Weight approx. 0.19g

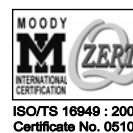
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	60	V
Collector Emitter Voltage	V_{CEO}	60	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	300	mA
Base Current	I_B	60	mA
Power Dissipation	P_{tot}	600	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_S	-55 to +150	$^\circ\text{C}$



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



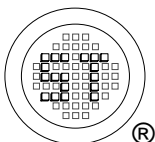
Dated : 08/07/2005

ST 2SC2002

www.DataSheet4U.com

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

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=1\text{V}$, $I_C=50\text{mA}$					
Current Gain Group M	h_{FE}	90	-	180	-
L	h_{FE}	135	-	270	-
K	h_{FE}	200	-	400	-
at $V_{CE}=2\text{V}$, $I_C=300\text{mA}$	h_{FE}	30	80	-	-
Base Emitter Voltage at $I_C=10\text{mA}$, $V_{CE}=6\text{V}$	V_{BE}	600	645	700	mV
Emitter Cutoff Current at $V_{EB}=5\text{V}$	I_{EBO}	-	-	100	nA
Collector Cutoff Current at $V_{CB}=60\text{V}$	I_{CBO}	-	-	100	nA
Collector Saturation Voltage at $I_C=300\text{mA}$, $I_B=30\text{mA}$	$V_{CE(sat)}$	-	0.15	0.6	V
Base Saturation Voltage at $I_C=300\text{mA}$, $I_B=30\text{mA}$	$V_{BE(sat)}$	-	0.86	1.2	V
Gain Bandwidth Product at $V_{CE}=6\text{V}$, $I_E=-10\text{mA}$	f_T	50	140	-	MHz
Collector to Base Capacitance at $V_{CB}=6\text{V}$, $f=1\text{MHz}$	C_{OB}	-	7.0	15	pF



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 014



ISO 9001:2000
Certificate No. 014

Dated : 08/07/2005