

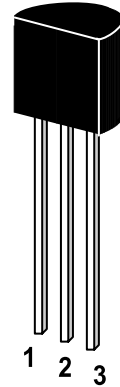
ST 2SC2001

NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into three groups, O, Y and G, according to its DC current gain.

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



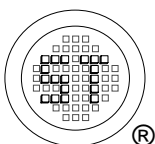
1. Emitter 2. Collector 3. Base

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}	30	V
Collector Emitter Voltage	V_{CEO}	25	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_{C}	700	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)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 71116



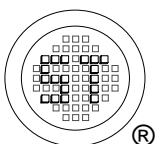
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Dated : 07/12/2002

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

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=1\text{V}$, $I_C=100\text{mA}$					
Current Gain Group O	h_{FE}	90	-	180	-
Y	h_{FE}	135	-	270	-
G	h_{FE}	200	-	400	-
at $V_{CE}=1\text{V}$, $I_C=700\text{mA}$	h_{FE}	50	-	-	-
Collector Base Breakdown Voltage at $I_C=10\mu\text{A}$	$V_{(BR)CBO}$	30	-	-	V
Base Emitter Voltage at $I_C=10\text{mA}$, $V_{CE}=6\text{V}$	V_{BE}	0.6	-	0.7	V
Emitter Cutoff Current at $V_{EB}=5\text{V}$	I_{EBO}	-	-	0.1	μA
Collector Cutoff Current at $V_{CB}=30\text{V}$	I_{CBO}	-	-	0.1	μA
Collector Saturation Voltage at $I_C=700\text{mA}$, $I_B=70\text{mA}$	$V_{CE(sat)}$	-	0.2	0.6	V
Base Saturation Voltage at $I_C=700\text{mA}$, $I_B=70\text{mA}$	$V_{BE(sat)}$	-	0.95	1.2	V
Gain Bandwidth Product at $V_{CE}=6\text{V}$, $I_C=10\text{mA}$	f_T	50	170	-	MHz
Output Capacitance at $V_{CB}=6\text{V}$, $f=1\text{MHz}$	C_{OB}	-	13	25	pF



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