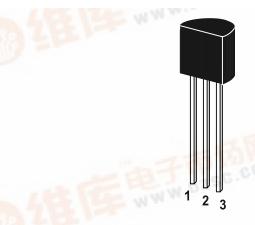
NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into five groups R, O, Y, P and L, according to its DC current gain. As complementary type the PNP transistor ST 2SA733 is recommended.

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 ($T_a = 25^{\circ}C$)

2 2 H	Symbol	Value	Unit
Collector Base Voltage	V _{CBO}	40	V
Collector Emitter Voltage	V _{CEO}	30	CCV
Emitter Base Voltage	V _{EBO}	5WW.DE	V
Collector Current	Ic	100	mA
Power Dissipation	P _{tot}	150	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	Ts	-55 to +150	°C



SEMTECH ELECTRONICS LTD.

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







Dated: 27/05/2003

Characteristics at T_{amb}=25 °C

	Symbol	Min.	Тур.	Max.	Unit
DC Current Gain					
at V _{CE} =6V, I _C =1mA ¹⁾					
Current Gain Group R	h _{FE}	40	-	80	-
0	h _{FE}	70	-	140	-
Υ	h _{FE}	120	-	240	-
Р	h _{FE}	200	-	400	-
L	h _{FE}	350	-	700	-
Collector Base Breakdown Voltage					
at I _C =100μA	$V_{(BR)CBO}$	40	-	-	V
Collector Emitter Breakdown Voltage					
at I _C =10mA	$V_{(BR)CEO}$	30	-	-	V
Emitter Base Breakdown Voltage					
at I _E =10μA	$V_{(BR)EBO}$	5	-	-	V
Collector Cutoff Current					
at V _{CB} =40V	I _{CBO}	-	-	0.1	μΑ
Emitter Cutoff Current					
at V _{EB} =3V	I _{EBO}	-	-	0.1	μΑ
Collector Saturation Voltage					
at $I_C=100$ mA, $I_B=10$ mA	V _{CE(sat)}	-	0.15	0.3	V
Gain Bandwidth Product					
at V_{CE} =6V, I_{C} =10mA	f⊤	-	300	-	MHz
Output Capacitance					
at V _{CB} =6V, f=1MHz	СОВ	-	2.5	-	pF
Noise Figure					
at V _{CE} =6V, I _E =0.5mA					
at f=1KHz, R_S =500 Ω	NF	-	4	-	dB











