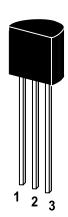
### **NPN Silicon Epitaxial Planar Transistor**

for switching and AF amplifier applications.

The transistor is subdivided into four groups, O, Y, G and L, 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<sub>a</sub> = 25°C)

	Symbol	Value	Unit
Collector Base Voltage	V <sub>CBO</sub>	40	V
Collector Emitter Voltage	V <sub>CEO</sub>	30	V
Emitter Base Voltage	V <sub>EBO</sub>	5	V
Collector Current	Ic	100	mA
Base Current	I <sub>B</sub>	50	mA
Power Dissipation	P <sub>tot</sub>	400	mW
Junction Temperature	T <sub>j</sub>	125	°C
Storage Temperature Range	Ts	-55 to +125	°C







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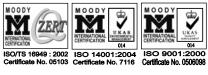
## **ST 2SC536**

### Characteristics at T<sub>amb</sub>=25 °C

	Symbol	Min.	Тур.	Max.	Unit
DC Current Gain					
at $V_{CE}$ =6V, $I_{C}$ =1mA					
Current Gain Group O	h <sub>FE</sub>	70	-	140	-
Y	h <sub>FE</sub>	120	-	240	-
G	h <sub>FE</sub>	200	-	400	-
L	h <sub>FE</sub>	350	-	700	-
at V <sub>CE</sub> =6V, I <sub>C</sub> =150mA	h <sub>FE</sub>	25	100	-	-
Collector Emitter Saturation Voltage					
at I <sub>C</sub> =50mA, I <sub>B</sub> =5mA	V <sub>CE(sat)</sub>	-	-	0.5	V
Base Emitter Saturation Voltage					
at I <sub>C</sub> =50mA, I <sub>B</sub> =5mA	$V_{BE(sat)}$	-	-	1.2	V
Collector Cutoff Current					
at V <sub>CB</sub> =35V	I <sub>CBO</sub>	-	-	0.1	μΑ
Emitter Cutoff Current					
at V <sub>EB</sub> =5V	I <sub>EBO</sub>	-	-	0.1	μΑ
Transition Frequency					
at V <sub>CE</sub> =10V, I <sub>E</sub> =1mA	f <sub>T</sub>	100	-	-	MHz
Collector Output Capacitance					
at V <sub>CB</sub> =10V, f=1MHz	Сов	-	2	3.5	pF
Base Intrinsic Resistance					
at V <sub>CB</sub> =10V I <sub>C</sub> =1mA, f=30MHz	Rbb'	-	50	-	Ω
Noise Figure					
at V <sub>CE</sub> =6V, I <sub>C</sub> =0.1Ma					
f=1KHz, $R_G$ =10K $\Omega$	NF	-	1	10	dB









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