## NPN Silicon Epitaxial Planar Transistor

High frequency amplifier applications.

The transistor is subdivided into three groups, R, O and Y, 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 (Ta=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>	4	V
Collector Current	Ι <sub>C</sub>	20	mA
Base Current	Ι <sub>Β</sub>	4	mA
Power Dissipation	P <sub>tot</sub>	100	mW
Junction Temperature Range	Tj	125	°C
Storage Temperature Range	Ts	-55 to +125	°C







## ST 2SC2668

## Characteristics at $T_{amb}=25$ °C

	Symbol	Min.	Тур.	Max.	Unit
DC Current Gain					
at $V_{CE}$ =6V, $I_C$ =1mA					
Current Gain Group R	h <sub>FE</sub>	40	-	80	-
0	h <sub>FE</sub>	70	-	140	-
Y	h <sub>FE</sub>	100	-	200	-
Collector Cutoff Current					
at $V_{CB}$ =40V	I <sub>CBO</sub>	-	-	0.5	μΑ
Emitter Cutoff Current					
at V <sub>EB</sub> =4V	I <sub>EBO</sub>	-	-	0.5	μΑ
Reverse Transfer Capacitance					
at V <sub>CE</sub> =6V, f=1MHz	Cre	-	0.70	-	pF
Transition Frequency					
at $V_{CE}$ =6V, I <sub>C</sub> =1mA	f⊤	-	550	-	MHz
Collector Base Time Constant					
at $V_{CE}$ =6V, I <sub>E</sub> =-1mA,f=30MHz	C <sub>C</sub> rbb'	-	-	30	ps
Noise Figure					
at $V_{CC}=6V$ , f=100MHz, I <sub>E</sub> =-1mA	NF	-	2.5	5.0	dB
Power Gain					
at V <sub>CC</sub> =6V, f=100MHz, I <sub>E</sub> =-1mA	$G_{pe}$	-	18	-	dB







Dated : 07/12/2002