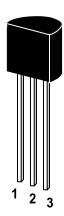
#### **NPN Silicon Epitaxial Planar Transistor**

Audio frequency low noise amplifier.

The transistor is subdivided into four groups, P, F, E and U 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>	120	V
Collector Emitter Voltage	V <sub>CEO</sub>	120	٧
Emitter Base Voltage	V <sub>EBO</sub>	5	V
Collector Current	Ic	50	mA
Base Current	I <sub>B</sub>	10	mA
Power Dissipation	P <sub>tot</sub>	300	mW
Junction Temperature	Tj	150	°C
Storage Temperature Range	Ts	-55 to +150	°C







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## ST 2SC2784

### 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 P	h <sub>FE</sub>	200	-	400	-
F	h <sub>FE</sub>	300	-	600	-
E	h <sub>FE</sub>	400	-	800	-
U	h <sub>FE</sub>	600	-	1200	-
at $V_{CE}$ =6V, $I_{C}$ =0.1mA	h <sub>FE</sub>	150	580	-	-
Collector Cutoff Current					
at V <sub>CB</sub> =120V	I <sub>CBO</sub>	-	-	0.05	μΑ
Emitter Cutoff Current					
at V <sub>EB</sub> =5V	I <sub>EBO</sub>	-	-	0.05	μΑ
Collector Cutoff Current					
at V <sub>CE</sub> =100V	I <sub>CEO</sub>	-	-	1	μΑ
Gain Bandwidth Product					
at $V_{CE}$ =6V, $I_{E}$ =1mA	f <sub>T</sub>	50	110	-	MHz
Noise Voltage	NV	-	25	40	mV
Output Capacitance					
at V <sub>CB</sub> =30V, f=1MHz	C <sub>OB</sub>	-	1.6	2.5	pF
Base Emitter Voltage					
at $V_{CE}$ =6 $V$ , $I_{C}$ =1 $mA$	$V_{BE}$	0.55	0.59	0.65	V
Collector Saturation Voltage					
at $I_C=10$ mA, $I_B=1$ mA	$V_{CE(sat)}$	-	0.07	0.3	V









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