

2SC2784

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.



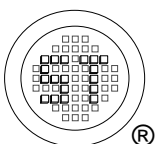
1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	120	V
Collector Emitter Voltage	V_{CEO}	120	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	50	mA
Base Current	I_B	10	mA
Power Dissipation	P_{tot}	300	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE} = 6\text{ V}$, $I_C = 1\text{ mA}$ at $V_{CE} = 6\text{ V}$, $I_C = 0.1\text{ mA}$	Current Gain Group P	h_{FE}	200	-	400	-
	F	h_{FE}	300	-	600	-
	E	h_{FE}	400	-	800	-
	U	h_{FE}	600	-	1200	-
		h_{FE}	150	580	-	-
Collector Base Cutoff Current at $V_{CB} = 120\text{ V}$	I_{CBO}	-	-	0.05	μA	
Collector Emitter Cutoff Current at $V_{CE} = 100\text{ V}$	I_{CEO}	-	-	1	μA	
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	I_{EBO}	-	-	0.05	μA	
Collector Emitter Saturation Voltage at $I_C = 10\text{ mA}$, $I_B = 1\text{ mA}$	$V_{CE(sat)}$	-	0.07	0.3	V	
Base Emitter Voltage at $V_{CE} = 6\text{ V}$, $I_C = 1\text{ mA}$	V_{BE}	0.55	0.59	0.65	V	
Gain Bandwidth Product at $V_{CE} = 6\text{ V}$, $I_E = 1\text{ mA}$	f_T	50	110	-	MHz	
Output Capacitance at $V_{CB} = 30\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	1.6	2.5	pF	



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