PNP Silicon Epitaxial Planar Transistor

for switching and amplifier applications. Especially suitable for AF-driver stages and low power output stages.

The transistor is subdivided into two groups C and D according to its DC current gain.



1. Emitter 2. Base 3. Collector TO-92 Plastic Package Weight approx. 0.19g

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symb	loo	Value		Unit	
Collector Base Voltage	-V _{CBO}		40		V	
Collector Emitter Voltage	-V _{CEO}		25		V	
Emitter Base Voltage	-V _{EBO}		6		V	
Collector Current	-I _C		2		А	
Base Current	-I _B	-I _B		100 m		
Power Dissipation	P _{tot}		1	W		
Junction Temperature	Tj		150	°C		
Storage Temperature Range	Ts		- 55 to + 150		°C	
Characteristics at $T_a = 25 ^{\circ}C$						
Parameter	Symbol	Min	. Тур.	Max.	Unit	
$ \begin{array}{l} \text{DC Current Gain} \\ \text{at -V}_{\text{CE}} = 1 \ \text{V}, \ \text{-I}_{\text{C}} = 5 \ \text{mA} \\ \text{at -V}_{\text{CE}} = 1 \ \text{V}, \ \text{-I}_{\text{C}} = 100 \ \text{mA} \\ \end{array} \\ \begin{array}{l} 85500 \\ 85500 \\ \text{at -V}_{\text{CE}} = 1 \ \text{V}, \ \text{-I}_{\text{C}} = 1.5 \ \text{A} \end{array} $		45 120 160 40		- 200 300 -		
Collector Base Cutoff Current at $-V_{CB} = 35 \text{ V}$	-I _{CBO}	-	-	100	nA	
Emitter Base Cutoff Current at $-V_{EB} = 6 V$	-I _{EBO}	-	-	100	nA	
Collector Base Breakdown Voltage at $-I_c = 100 \ \mu A$	-V _{(BR)CBO}	40	-	-	V	
Collector Emitter Breakdown Voltage at $-I_c = 2 \text{ mA}$	-V _{(BR)CEO}	25	-	-	V	
Emitter Base Breakdown Voltage at $-I_E = 100 \ \mu A$	-V _{(BR)EBO}	6	-	-	V	
Collector Emitter Saturation Voltage at $-I_c = 1.5 \text{ A}$, $-I_B = 100 \text{ mA}$	-V _{CE(sat)}	-	-	0.5	V	
Base Emitter Saturation Voltage at $-I_c = 1.5 \text{ A}$, $-I_B = 100 \text{ mA}$	-V _{BE(sat)}	-	-	1.2	V	
Base Emitter On Voltage at $-I_C = 10 \text{ mA}$, $-V_{CE} = 1 \text{ V}$	-V _{BE(on)}	-	-	1	V	
Gain Bandwidth Product at $-V_{CE} = 10 \text{ V}, -I_{C} = 50 \text{ mA}$	f⊤	120	-	-	MHz	
Collector Base Capacitance at $-V_{CB} = 10 \text{ V}, \text{ f} = 1 \text{ MHz}$	Сов	-	15	-	pF	



SEMTECH ELECTRONICS LTD.

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

