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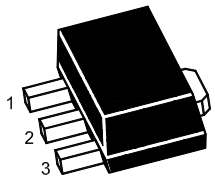
SOT-89

2SB772U

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PNP SILICON EPITAXIAL POWER TRANSISTOR

These devices are intended for use in audio frequency power amplifier and low speed switching applications



1.Base 2.Collector 3.Emitter

SOT-89 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	40	V
Collector Emitter Voltage	$-V_{CEO}$	30	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	3	A
Peak Collector Current (t = 10 ms)	$-I_{CP}$	7	A
Base Current	$-I_B$	0.6	A
Total Power Dissipation @ T_a = 25 °C	P_D	1	W
Total Power Dissipation @ T_c = 25 °C	P_D	10	W
Operating and Storage Junction Temperature Range	T_j , T_{stg}	- 65 to + 150	°C

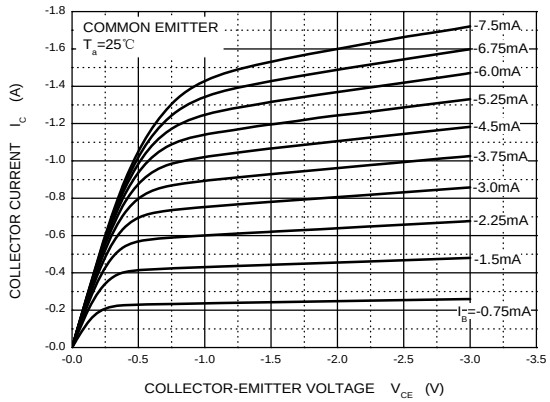
Characteristics at T_a = 25 °C

Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain						
at $-V_{CE}$ = 2 V, $-I_C$ = 20 mA		h_{FE}	30	-	-	-
at $-V_{CE}$ = 2 V, $-I_C$ = 1 A Current Gain Group	R	h_{FE}	60	-	120	-
	Q	h_{FE}	100	-	200	-
	P	h_{FE}	160	-	320	-
	E	h_{FE}	200	-	400	-
Collector Base Cutoff Current at $-V_{CB}$ = 30 V		$-I_{CBO}$	-	-	1	μA
Emitter Base Cutoff Current at $-V_{EB}$ = 3 V		$-I_{EBO}$	-	-	1	μA
Collector Base Breakdown Voltage at $-I_C$ = 1 mA		$-V_{(BR)CBO}$	40	-	-	V
Collector Emitter Breakdown Voltage at $-I_C$ = 1 mA		$-V_{(BR)CEO}$	30	-	-	V
Emitter Base Breakdown Voltage at $-I_E$ = 1 mA		$-V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at $-I_C$ = 2 A, $-I_B$ = 200 mA		$-V_{CE(sat)}$	-	-	0.5	V
Base Emitter Saturation Voltage at $-I_C$ = 2 A, $-I_B$ = 200 mA		$-V_{BE(sat)}$	-	-	2	V
Current Gain Bandwidth Product at $-V_{CE}$ = 5 V, $-I_C$ = 100 mA,		f_T	-	80	-	MHz
Output Capacitance at $-V_{CB}$ = 10 V, f = 1 MHz		C_{ob}	-	55	-	pF

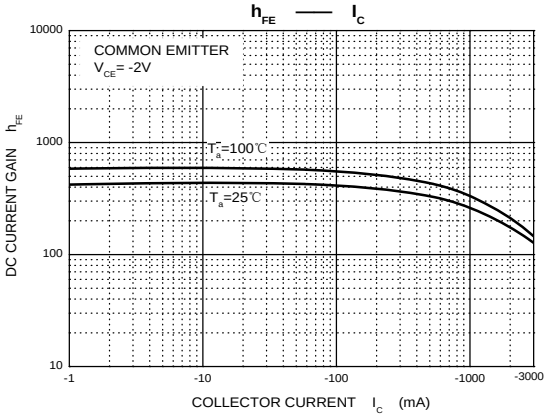
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Typical Characteristics

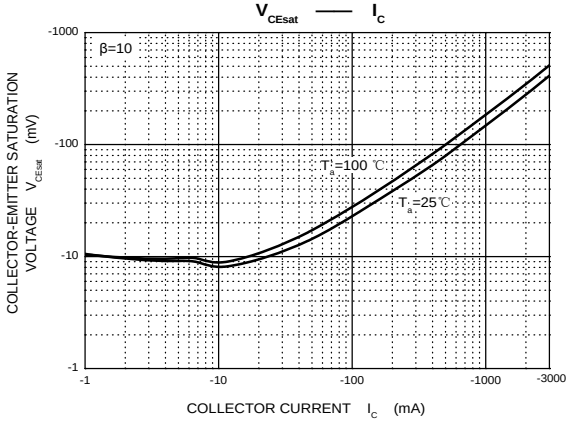
Static Characteristic



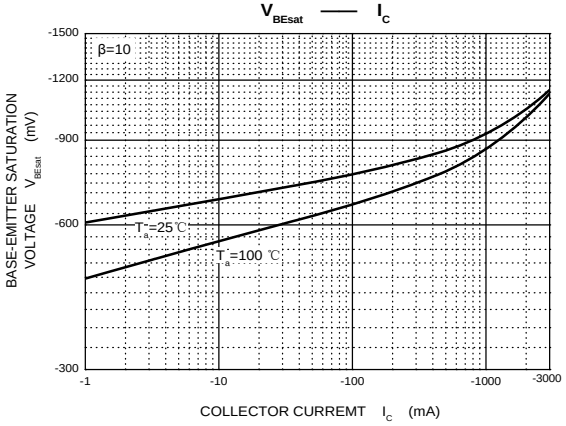
h_{FE} —— I_C



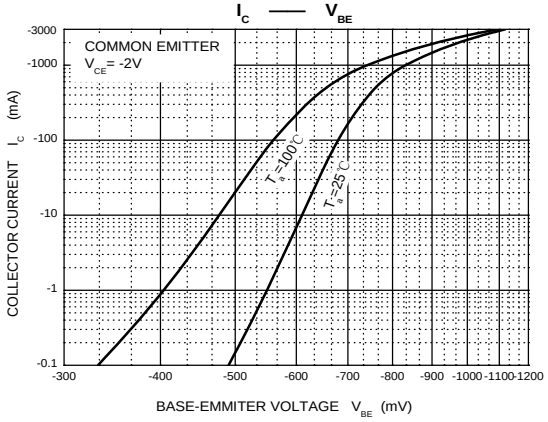
V_{CEsat} —— I_C



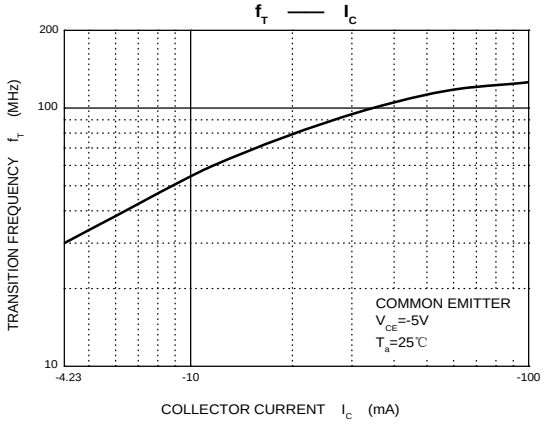
V_{BEsat} —— I_C



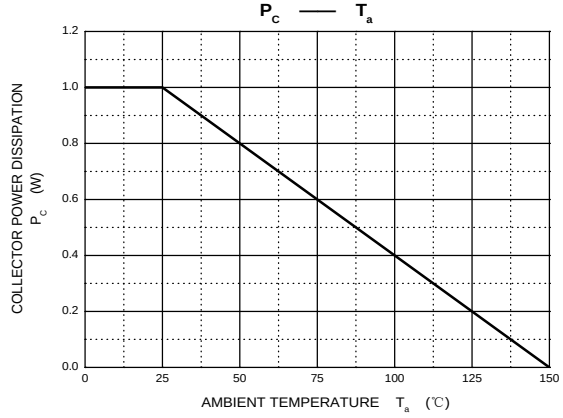
I_C —— V_{BE}



f_T —— I_C



P_C —— T_a



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