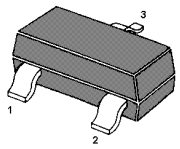
MMBTSA1981

PNP Silicon Epitaxial Planar Transistors

for audio power amplifier applications.



1. Base 2. Emitter 3. Collector
TO-236 Plastic Package

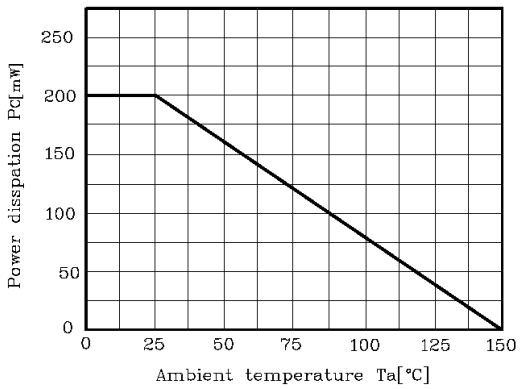
Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	35	V
Collector Emitter Voltage	$-V_{CEO}$	30	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	800	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

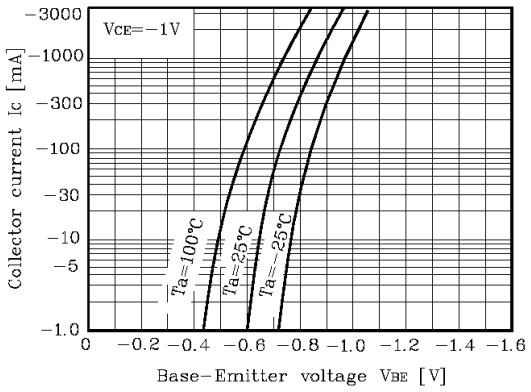
Characteristics at T_a = 25 °C

Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE}$ = 1 V, $-I_C$ = 100 mA	Current Gain Group O Y	h_{FE} h_{FE}	100 160	- -	200 320	- -
Collector Base Cutoff Current at $-V_{CB}$ = 35 V		$-I_{CBO}$	-	-	100	nA
Emitter Base Cutoff Current at $-V_{EB}$ = 5 V		$-I_{EBO}$	-	-	100	nA
Collector Base Breakdown Voltage at $-I_C$ = 500 µA		$-V_{(BR)CBO}$	35	-	-	V
Collector Emitter Breakdown Voltage at $-I_C$ = 1 mA		$-V_{(BR)CEO}$	30	-	-	V
Emitter Base Breakdown Voltage at $-I_E$ = 50 µA		$-V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at $-I_C$ = 500 mA, $-I_B$ = 20 mA		$-V_{CE(sat)}$	-	-	0.5	V
Transition Frequency at $-V_{CE}$ = 5 V, $-I_E$ = 10 mA		f_T	-	120	-	MHz
Collector Output Capacitance at $-V_{CB}$ = 10 V, f = 1 MHz		C_{ob}	-	19	-	pF

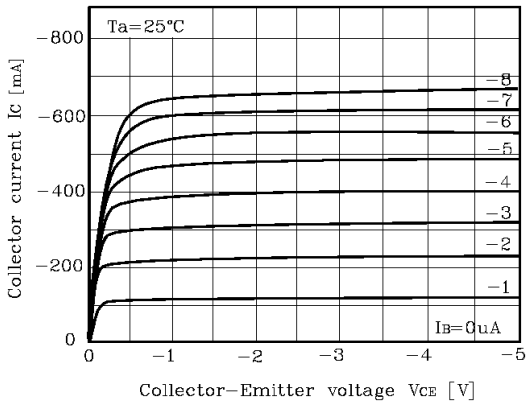
Pc-Ta



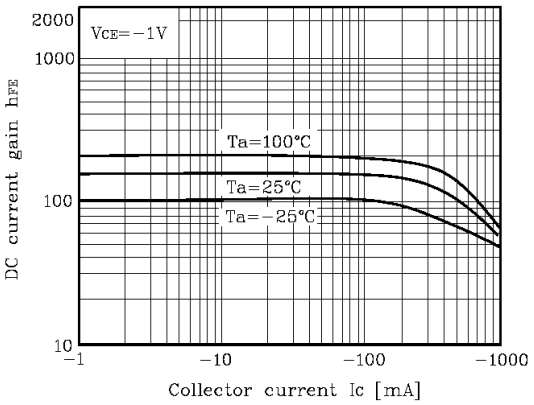
IC -V_{BE}



I_C - V_{CE}



h_{FE} - I_C



$V_{CE(SAT)}$ - I_C