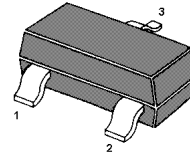


MMBTSA1235

PNP Silicon Epitaxial Planar Transistor

for low frequency amplification applications

The transistor is subdivided into two groups E and F, according to its DC current gain.



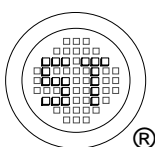
1. Base 2. Emitter 3. Collector
SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	60	V
Collector Emitter Voltage	$-V_{CEO}$	50	V
Emitter Base Voltage	$-V_{EBO}$	6	V
Collector Current	$-I_C$	200	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

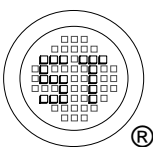
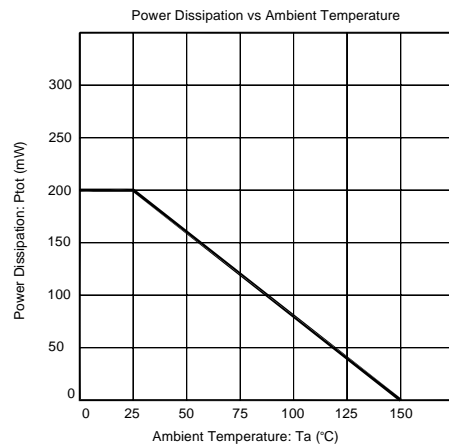
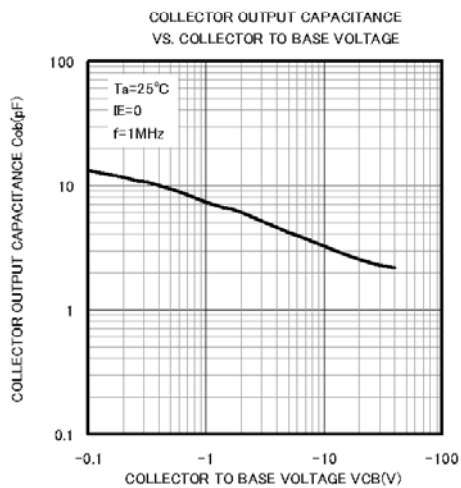
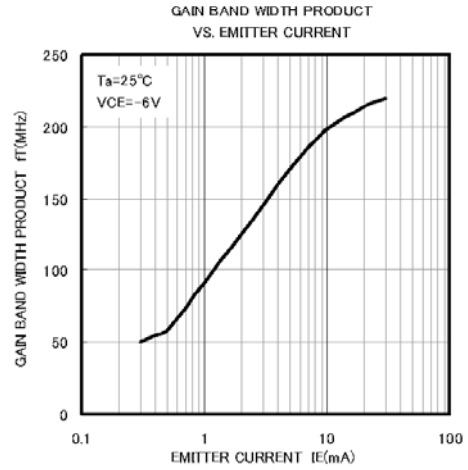
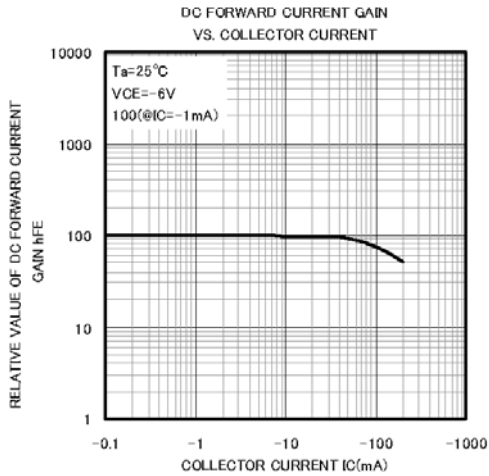
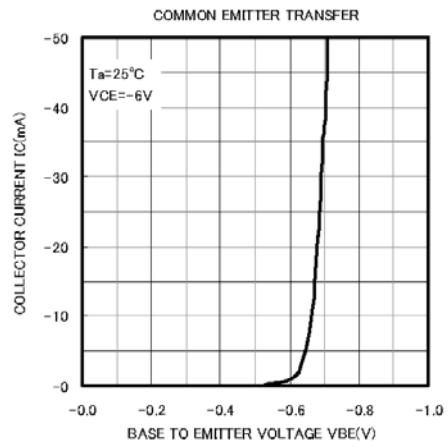
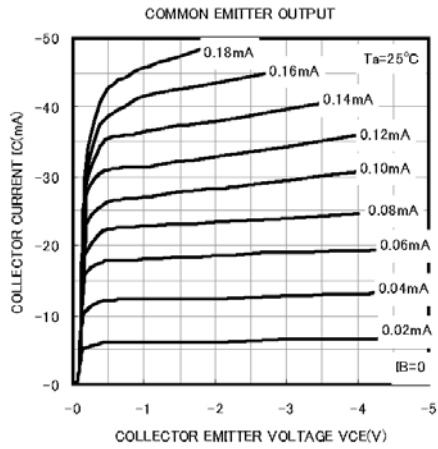
Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 6\text{ V}$, $-I_C = 1\text{ mA}$ Current Gain Group E F at $-V_{CE} = 6\text{ V}$, $-I_C = 0.1\text{ mA}$	h_{FE}	150	-	300	-
	h_{FE}	250	-	500	-
	h_{FE}	90	-	-	-
Collector Base Cutoff Current at $-V_{CB} = 60\text{ V}$	$-I_{CBO}$	-	-	100	nA
Emitter Base Cutoff Current at $-V_{EB} = 6\text{ V}$	$-I_{EBO}$	-	-	100	nA
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	60	-	-	V
Collector Emitter Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CEO}$	50	-	-	V
Emitter Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	6	-	-	V
Collector Emitter Saturation Voltage at $-I_C = 100\text{ mA}$, $-I_B = 10\text{ mA}$	$-V_{CE(sat)}$	-	-	0.3	V
Base Emitter Saturation Voltage at $-I_C = 100\text{ mA}$, $-I_B = 10\text{ mA}$	$-V_{BE(sat)}$	-	-	1	V
Gain Bandwidth Product at $-V_{CE} = 6\text{ V}$, $-I_C = 10\text{ mA}$	f_T	-	200	-	MHz
Collector Output Capacitance at $-V_{CB} = 6\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	4	-	pF



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