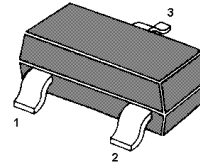


MMBT5087

PNP Silicon Epitaxial Planar Transistor

for general purpose application



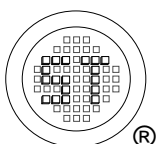
1.BASE 2.EMITTER 3.COLLECTOR
TO-236 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	50	V
Collector Emitter Voltage	$-V_{CEO}$	50	V
Emitter Base Voltage	$-V_{EBO}$	3	V
Collector Current	$-I_C$	100	mA
Peak Collector Current	$-I_{CM}$	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.	Max.	Unit
DC Current Gain at $-V_{CE} = 5\text{ V}$, $-I_C = 100\text{ }\mu\text{A}$	h_{FE}	250	800	-
at $-V_{CE} = 5\text{ V}$, $-I_C = 1\text{ mA}$	h_{FE}	250	-	-
at $-V_{CE} = 5\text{ V}$, $-I_C = 10\text{ mA}$	h_{FE}	250	-	-
Collector Cutoff Current at $-V_{CB} = 35\text{ V}$	$-I_{CBO}$	-	50	nA
Emitter Cutoff Current at $-V_{EB} = 3\text{ V}$	$-I_{EBO}$	-	50	nA
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	50	-	V
Collector Emitter Breakdown Voltage at $-I_C = 1\text{ mA}$	$-V_{(BR)CEO}$	50	-	V
Emitter Base Breakdown Voltage at $-I_E = 100\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	3	-	V
Collector Emitter Saturation Voltage at $-I_C = 10\text{ mA}$, $-I_B = 1\text{ mA}$	$-V_{CE(sat)}$	-	0.3	V
Base Emitter On Voltage at $-V_{CE} = 5\text{ V}$, $-I_C = 1\text{ mA}$	$-V_{BE(on)}$	-	0.85	V
Transition Frequency at $-V_{CE} = 5\text{ V}$, $I_E = 0.5\text{ mA}$, $f = 100\text{ MHz}$	f_T	40	-	MHz
Collector Base Capacitance at $-V_{CE} = 5\text{ V}$, $I_E = 0$, $f = 100\text{ KHz}$	C_{cb}	-	4	pF



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ISO/TS 18949 : 2008 Certificate No. 16071300
ISO14001 : 2004 Certificate No. 7116
ISO 9001 : 2008 Certificate No. 5071940
BS-OHSAS 18001 : 2007 Certificate No. 7116
IECQ QC 080000 Certificate No. PRC-HSPM-1463

Dated : 16/03/2015 Rev:01

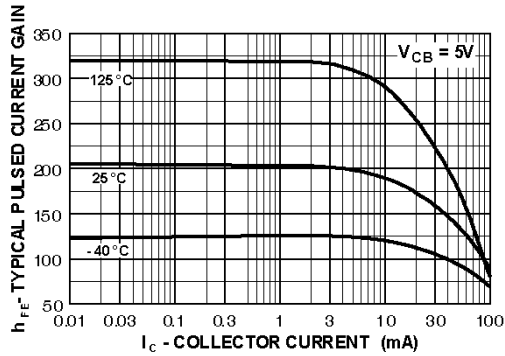


Figure 1. Typical Pulsed Current Gain vs Collector Current

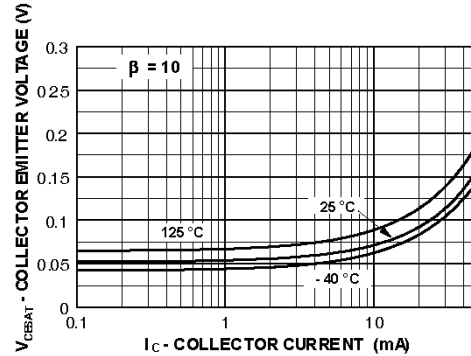


Figure 2. Collector-Emitter Saturation Voltage vs Collector Current

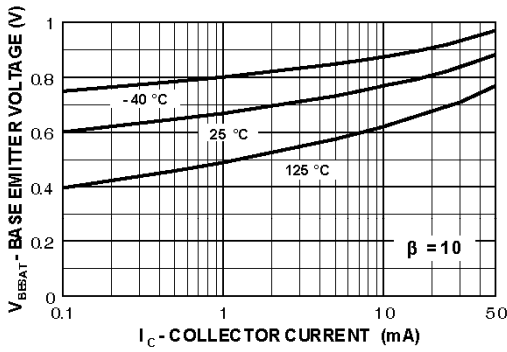


Figure 3. Base-Emitter Saturation Voltage vs Collector Current

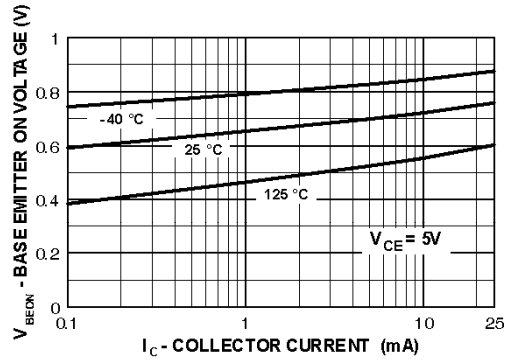


Figure 4. Base-Emitter On Voltage vs Collector Current

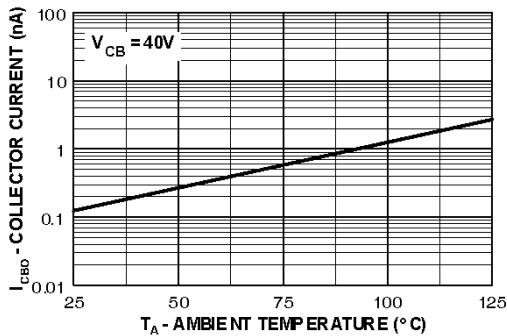


Figure 5. Collector Cutoff Current vs Ambient Temperature

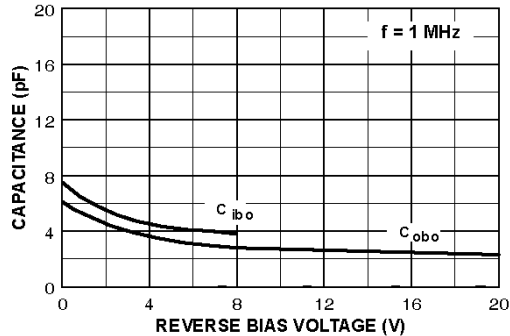
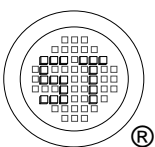


Figure 6. Input and Output Capacitance vs Reverse Voltage



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