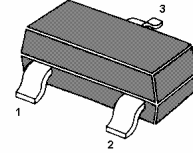


MMBT8050C / MMBT8050D (1.5A)

NPN 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. As complementary type the PNP transistor MMBT8550C and MMBT8550D (1.5A) is recommended.

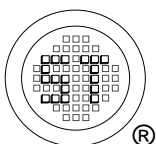


1. Base 2. Emitter 3. Collector

SOT-23 Plastic Package

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

	Symbol	Value	Unit
Collector Emitter Voltage	V_{CEO}	25	V
Collector Base Voltage	V_{CBO}	40	V
Emitter Base Voltage	V_{EBO}	6	V
Peak Collector Current	I_{CM}	1.5	A
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +150	$^\circ\text{C}$



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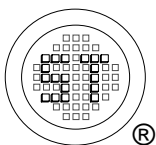


Dated : 20/10/2005

MMBT8050C / MMBT8050D (1.5A)

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

	Symbol	Min.	Max.	Unit
DC Current Gain at $V_{CE}=1V$, $I_C=100mA$ at $V_{CE}=1V$, $I_C=800mA$	MMBT8050C h_{FE}	100	250	-
	MMBT8050D h_{FE}	160	400	-
	h_{FE}	40	-	-
Collector Cutoff Current at $V_{CB}=35V$	I_{CBO}	-	100	nA
Emitter Cutoff Current at $V_{EB}=6V$	I_{EBO}	-	100	nA
Collector Saturation Voltage at $I_C=800mA$, $I_B=80mA$	$V_{CE(sat)}$	-	0.5	V
Base Saturation Voltage at $I_C=800mA$, $I_B=80mA$	$V_{BE(sat)}$	-	1.2	V
Collector Emitter Breakdown Voltage at $I_C=2mA$	$V_{(BR)CEO}$	25	-	V
Collector Base Breakdown Voltage at $I_C=100\mu A$	$V_{(BR)CBO}$	40	-	V
Emitter Base Breakdown Voltage at $I_E=100\mu A$	$V_{(BR)EBO}$	6	-	V
Base Emitter Voltage at $I_C=10mA$, $V_{CE}=1V$	V_{BE}	-	1	V
Transition frequency at $V_{CE}=10V$, $I_C=50mA$	f_T	120	-	MHz



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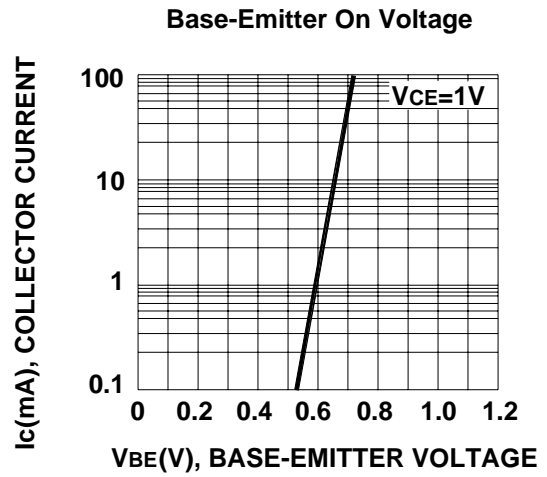
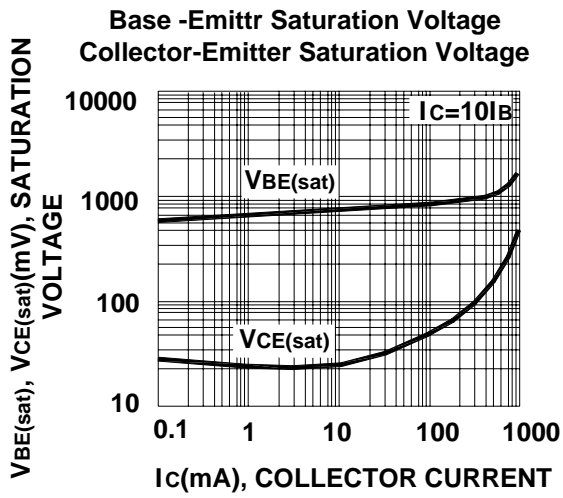
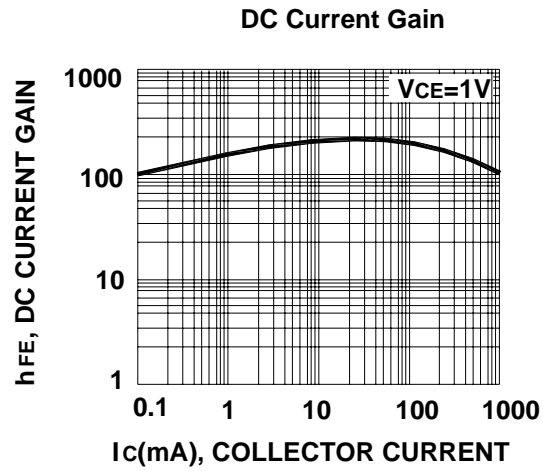
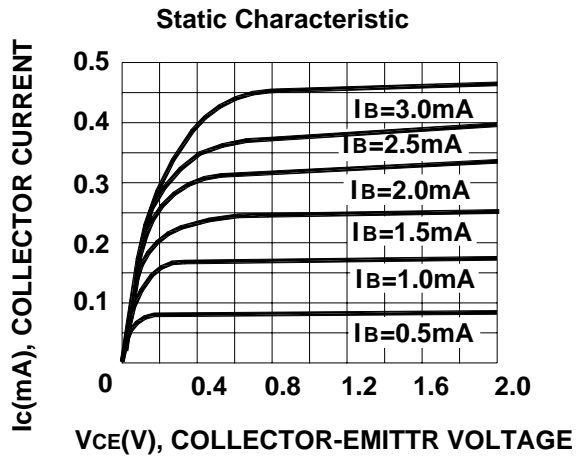
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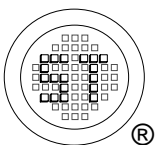
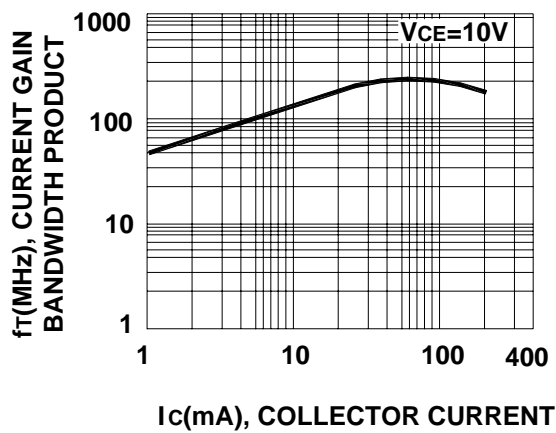
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MMBT8050C / MMBT8050D (1.5A)

Typical Characteristics



Current Gain Bandwidth Product



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ISO/TS 16949 : 2002 Certificate No. 05103
ISO 14001:2004 Certificate No. 7116
ISO 9001:2000 Certificate No. 0506/98

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