

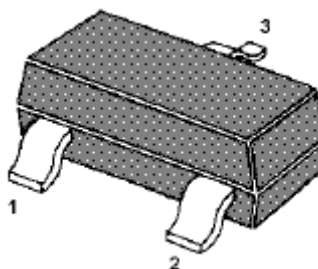
# Kingtronics®

## MMBT8050

### NPN Silicon Epitaxial Planar Transistors

#### For switching and amplifier applications

As complementary types the PNP transistors MMBT8550 is recommended.



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

#### Absolute Maximum Ratings (Ta = 25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Collector Base Voltage	$V_{CBO}$	40	V
Collector Emitter Voltage	$V_{CEO}$	25	V
Emitter Base Voltage	$V_{EBO}$	6	V
Collector Current	$I_C$	600	mA
Power Dissipation	$P_{tot}$	350	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_s$	- 55 to + 150	°C

#### Characteristics at Ta = 25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
DC Current Gain at $V_{CE} = 1\text{ V}$ , $I_C = 100\text{ mA}$	$h_{FE}$	100	-	250	-
MMBT8050D		160	-	400	-
at $V_{CE} = 1\text{ V}$ , $I_C = 500\text{ mA}$		40	-	-	-
Collector Base Cutoff Current at $V_{CB} = 35\text{ V}$	$I_{CBO}$	-	-	100	nA
Collector Base Breakdown Voltage at $I_C = 10\text{ }\mu\text{A}$	$V_{(BR)CBO}$	40	-	-	V
Collector Emitter Breakdown Voltage at $I_C = 2\text{ mA}$	$V_{(BR)CEO}$	25	-	-	V
Emitter Base Breakdown Voltage at $I_E = 100\text{ }\mu\text{A}$	$V_{(BR)EBO}$	6	-	-	V
Collector Emitter Saturation Voltage at $I_C = 500\text{ mA}$ , $I_B = 50\text{ mA}$	$V_{CE(sat)}$	-	-	0.5	V
Base Emitter Saturation Voltage at $I_C = 500\text{ mA}$ , $I_B = 50\text{ mA}$	$V_{BE(sat)}$	-	-	1.2	V
Gain Bandwidth Product at $V_{CE} = 5\text{ V}$ , $I_C = 10\text{ mA}$	$f_T$	-	100	-	MHz

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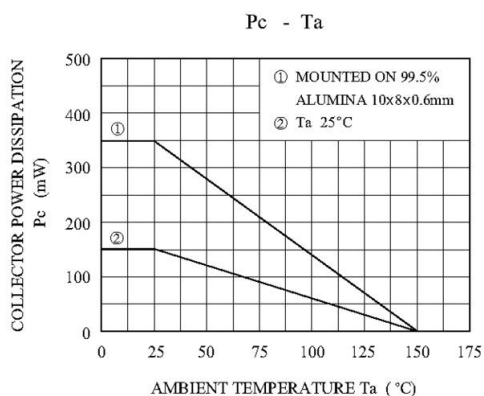
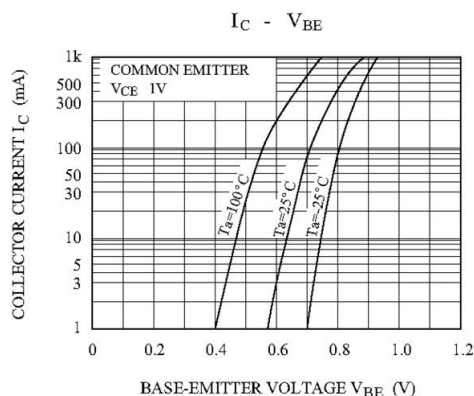
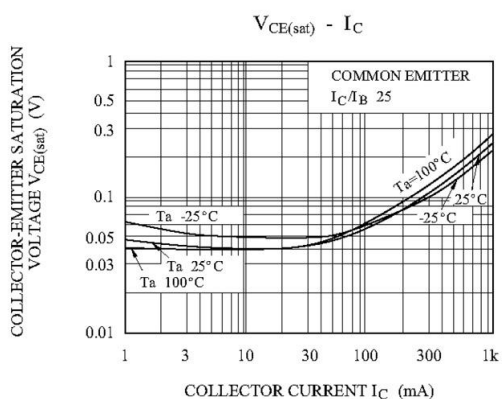
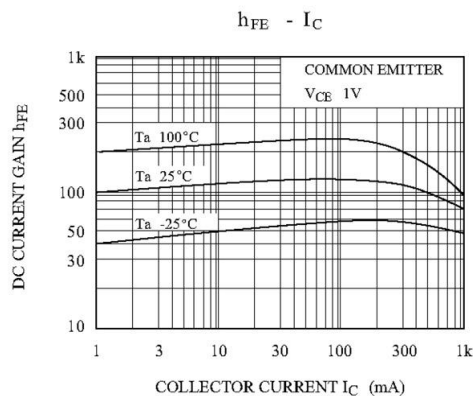
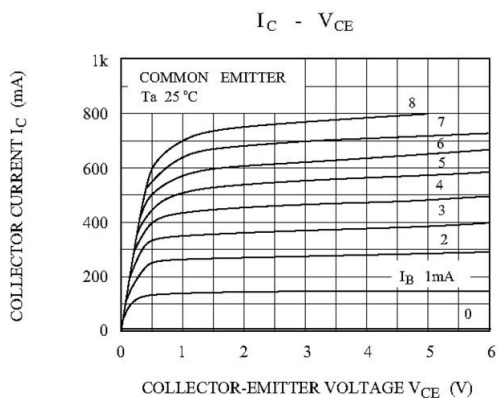
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### RATINGS AND CHARACTERISTIC CURVES MMBT8050



Note: Specifications are subject to change without notice.

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