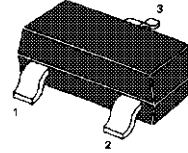


MMBT8550C / MMBT8550D

PNP Silicon Epitaxial Planar Transistor
for switching and amplifier applications.

As complementary type the NPN transistor
MMBT8050C and MMBT8050D are
recommended.

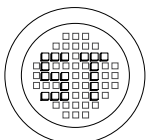


1. Base 2. Emitter 3. Collector

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
Collector Current	$-I_C$	600	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +150	$^\circ\text{C}$



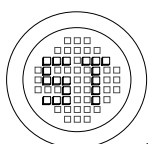
РАДИОТЕХ

Тел.: (495) 795-0805
Факс: (495) 234-1603
Эл. почта: info@rct.ru
Веб: www.rct.ru

MMBT8550C / MMBT8550D

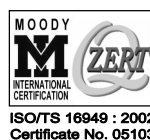
Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE}=1\text{V}$, $-I_C=100\text{mA}$	MMBT8550C h_{FE}	100	-	250	-
	MMBT8550D h_{FE}	160	-	400	-
	at $-V_{CE}=1\text{V}$, $-I_C=500\text{mA}$ h_{FE}	40	-	-	-
Collector Cutoff Current at $-V_{CB}=35\text{V}$	$-I_{CBO}$	-	-	100	nA
Collector Saturation Voltage at $-I_C=500\text{mA}$, $-I_B=50\text{mA}$	$-V_{CE(sat)}$	-	-	0.5	V
Base Saturation Voltage at $-I_C=500\text{mA}$, $-I_B=50\text{mA}$	$-V_{BE(sat)}$	-	-	1.2	V
Collector Emitter Breakdown Voltage at $-I_C=2\text{mA}$	$-V_{(BR)CEO}$	25	-	-	V
Collector Base Breakdown Voltage at $-I_C=10\mu\text{A}$	$-V_{(BR)CBO}$	40	-	-	V
Emitter Base Breakdown Voltage at $-I_E=100\mu\text{A}$	$-V_{(BR)EBO}$	6	-	-	V
Gain Bandwidth Product at $-V_{CE}=5\text{V}$, $-I_C=10\text{mA}$, $f=50\text{MHz}$	f_T	-	100	-	MHz
Collector Base Capacitance at $-V_{CB}=10\text{V}$, $f=1\text{MHz}$	C_{CBO}	-	12	-	pF
Thermal Resistance Junction to Ambient	R_{thA}	-	-	200	K/W



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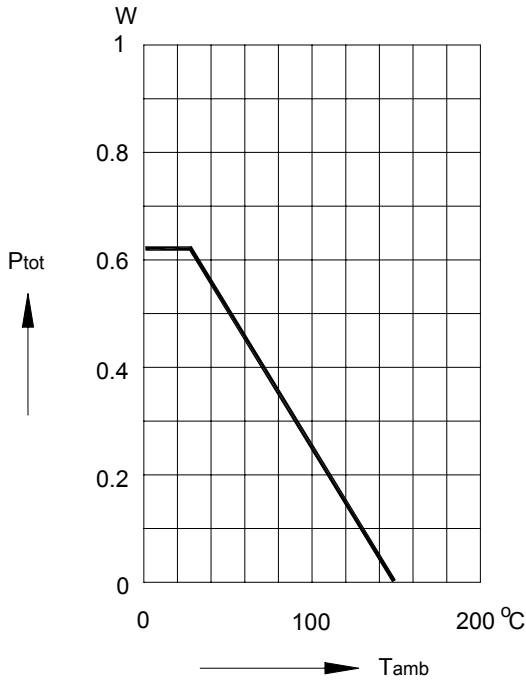
(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



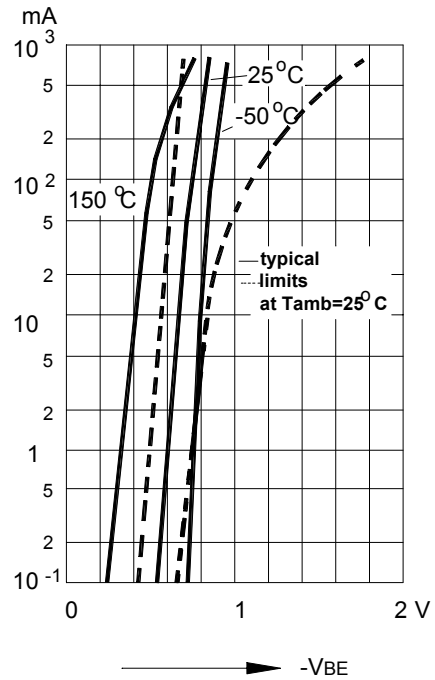
MMBT8550C / MMBT8550D

Admissible power dissipation versus ambient temperature

Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case

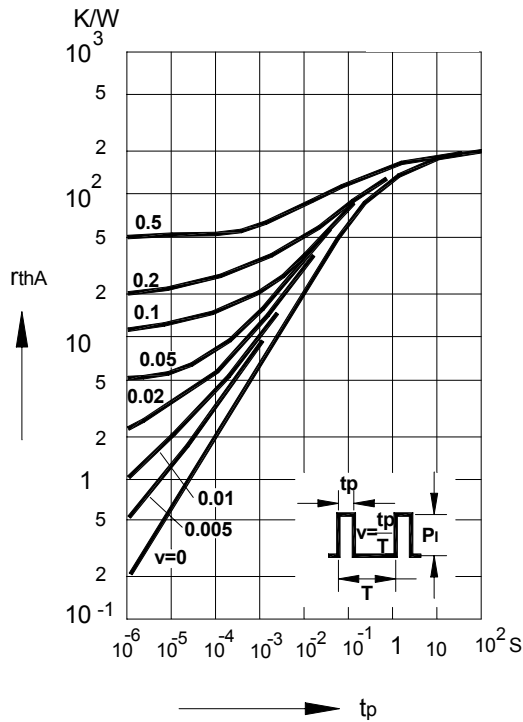


Collector current versus base emitter voltage

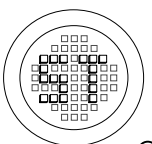
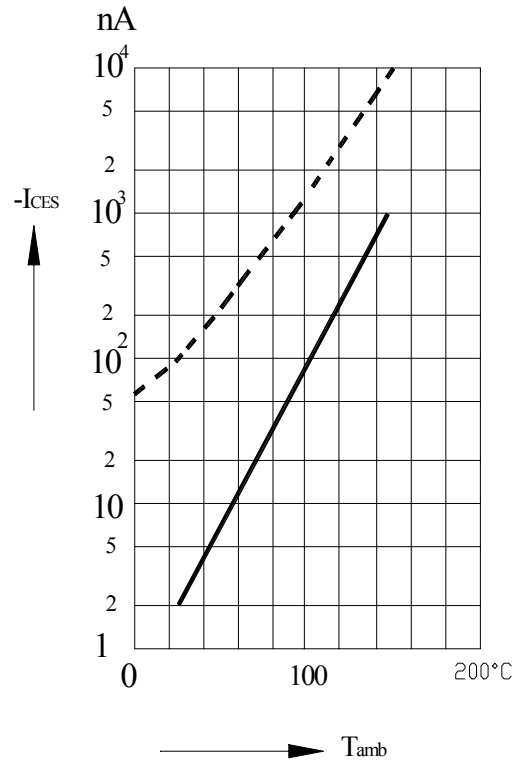


Pulse thermal resistance versus pulse duration

Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case

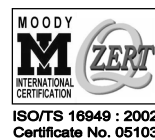


Collector cutoff current versus ambient temperature



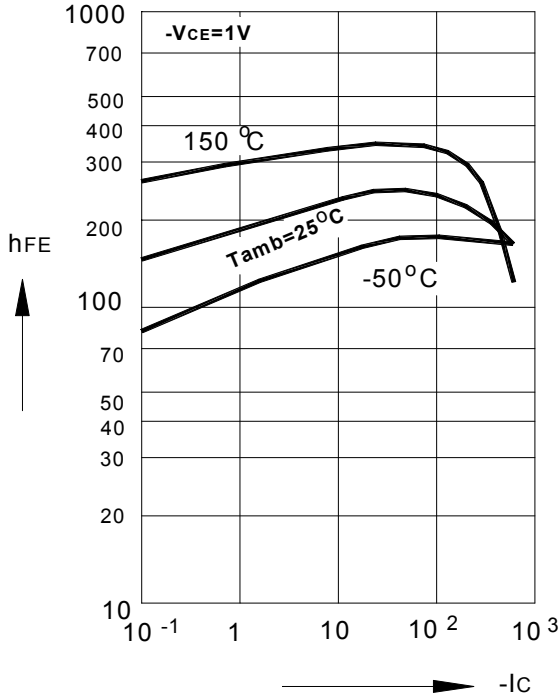
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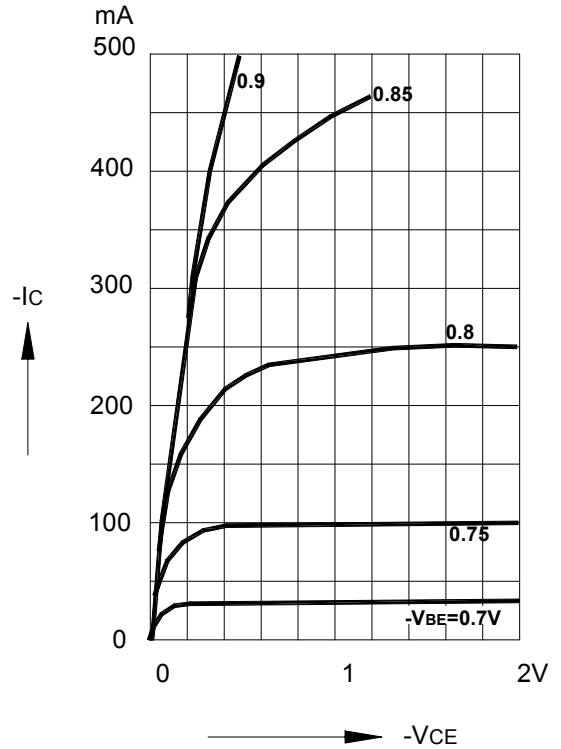


MMBT8550C / MMBT8550D

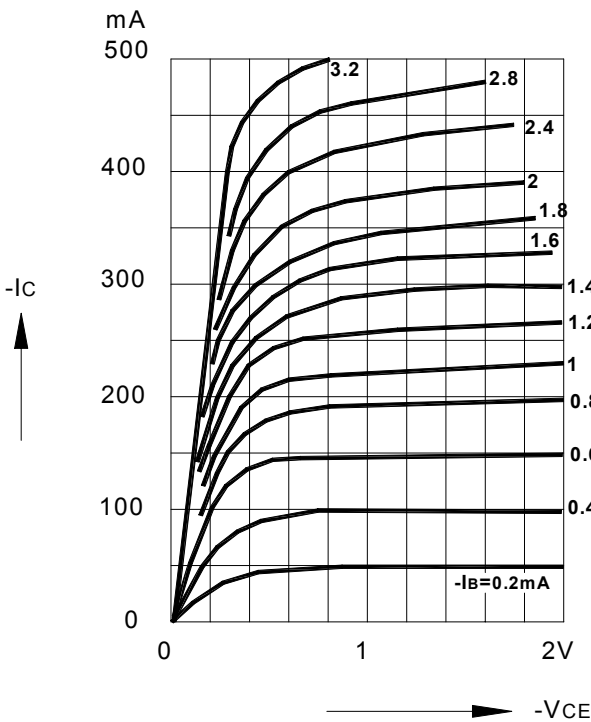
DC current gain
versus collector current



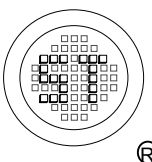
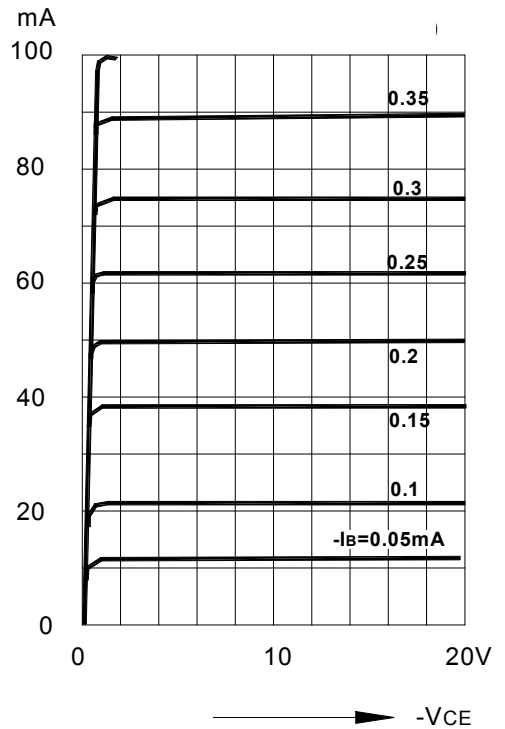
Common emitter
collector characteristics



Common emitter
collector characteristics

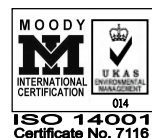
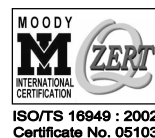


Common emitter
collector characteristics



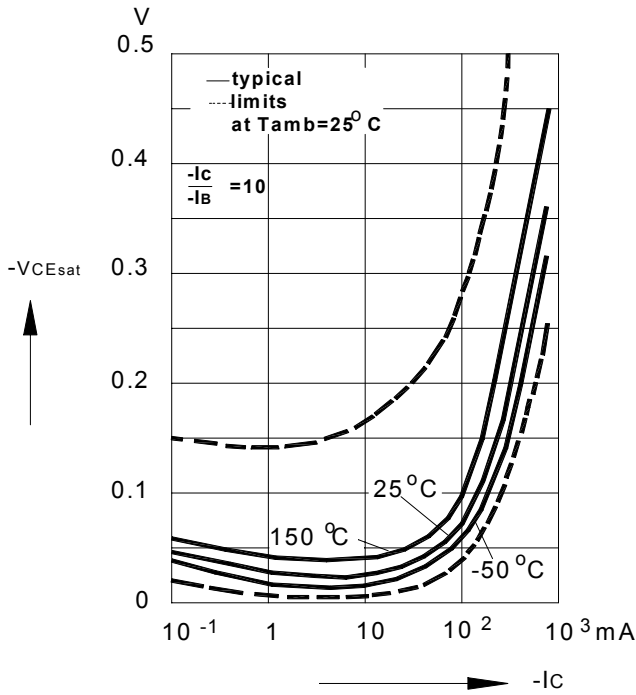
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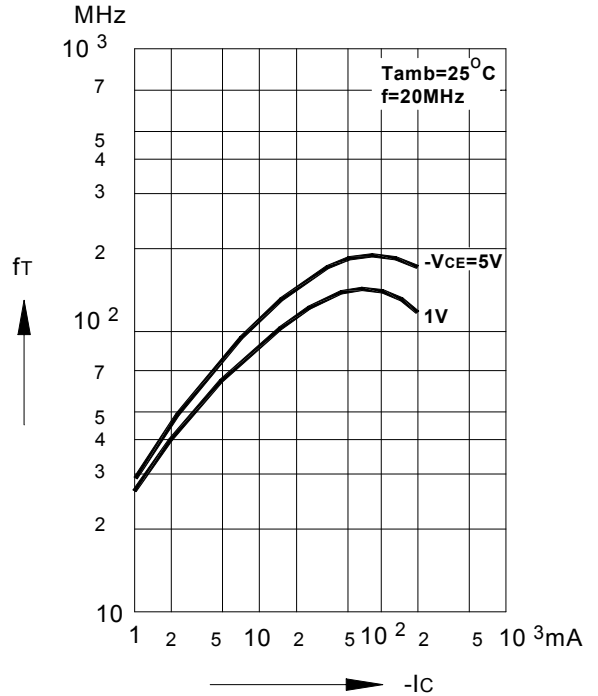


MMBT8550C / MMBT8550D

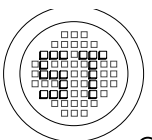
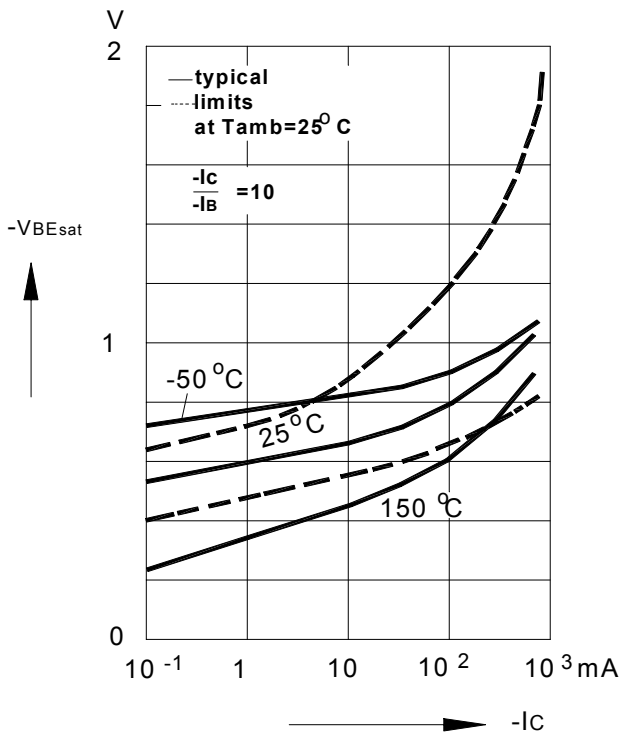
Collector saturation voltage versus collector current



Gain bandwidth product versus collector current



Base saturation voltage versus collector current



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