

Kingtronics® Kt®

BC807

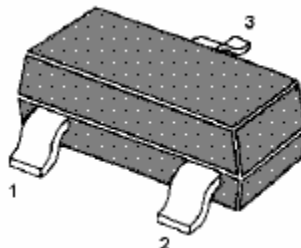
PNP Silicon Epitaxial Planar Transistors

For switching, AF driver and amplifier applications

These transistors are subdivided into three groups

-16, -25 and -40, according to their current gain.

As complementary types the NPN transistors BC817 and BC818 are recommended.



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

Absolute Maximum Ratings (Ta = 25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Collector Base Voltage	$-V_{CB0}$	50	V
Collector Emitter Voltage	$-V_{CEO}$	45	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	500	mA
Power Dissipation	P_{tot}	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	K/W
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_S	- 55 to + 150	°C

Electrical 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	
Current Gain Group -16		160	-	400	-
-25		250		600	
at $-V_{CE} = 1\text{ V}$, $-I_C = 500\text{ mA}$		40		-	
Collector Base Cutoff Current	$-I_{CBO}$	-	-	100	nA
at $-V_{CB} = 20\text{ V}$					
Emitter-Base Cutoff Current	$-I_{EBO}$	-	-	100	nA
at $-V_{EB} = 5\text{ V}$					
Collector Saturation Voltage	$-V_{CEsat}$	-	-	0.7	V
at $-I_C = 500\text{ mA}$, $-I_B = 50\text{ mA}$					
Base-Emitter Voltage	$-V_{BE(on)}$	-	-	1.2	V
at $-I_C = 500\text{ mA}$, $-V_{CE} = 1\text{ V}$					
Gain-Bandwidth Product	f_t	80	-	-	MHz
at $-V_{CE} = 5\text{ V}$, $-I_C = 10\text{ mA}$, $f = 50\text{ MHz}$					
Collector-Base Capacitance	C_{CBO}	-	9	-	pF
at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$					

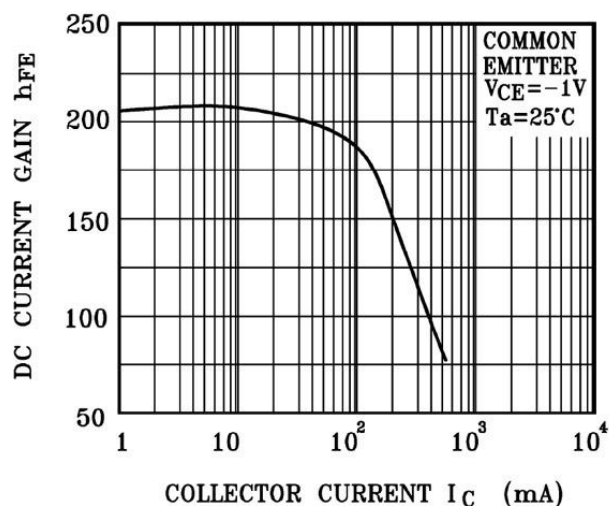
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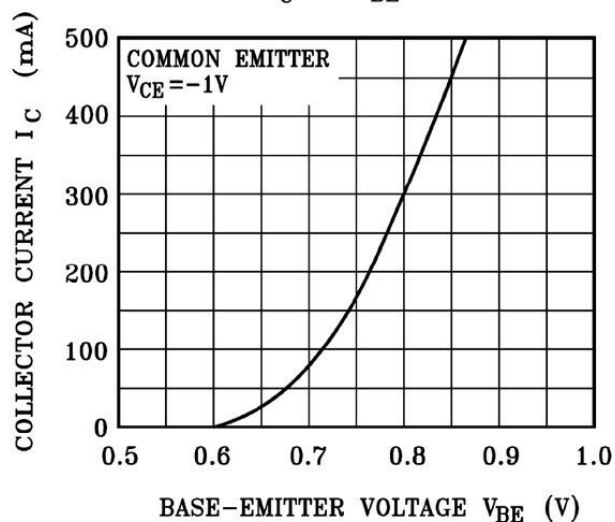
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RATINGS AND CHARACTERISTIC CURVES BC807

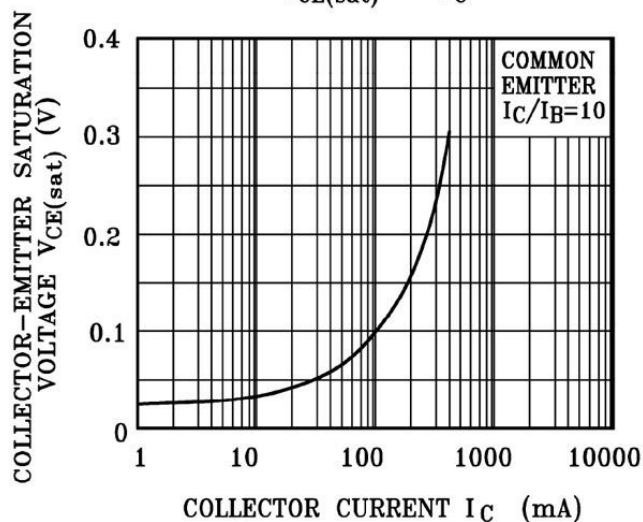
$h_{FE} - I_C$



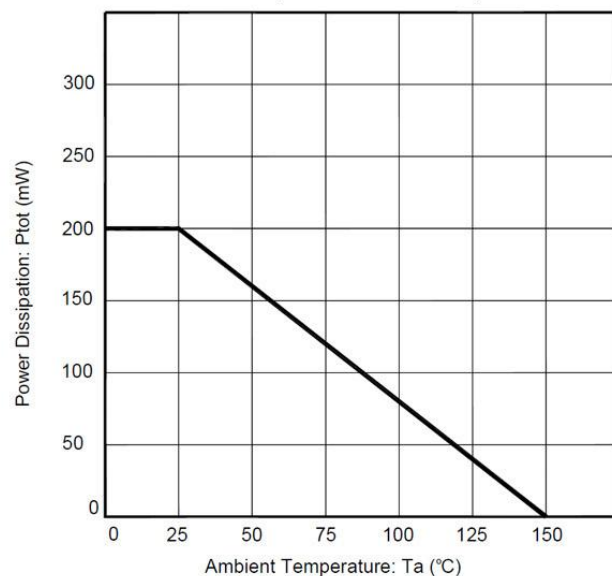
$I_C - V_{BE}$



$V_{CE(sat)} - I_C$



Power Dissipation vs Ambient Temperature



Note: Specifications are subject to change without notice.