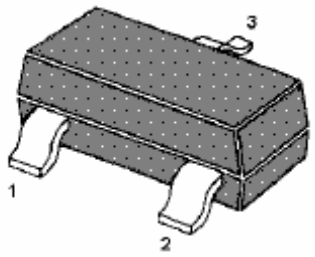
Kingtronics®

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 (T_a = 25℃)

PARAMETER	SYMBOL	VALUE	UNIT
Collector Base Voltage	$-V_{CBO}$	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	℃
Storage Temperature Range	T_S	- 55 to + 150	℃

Electrical Characteristics at T_a = 25℃

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

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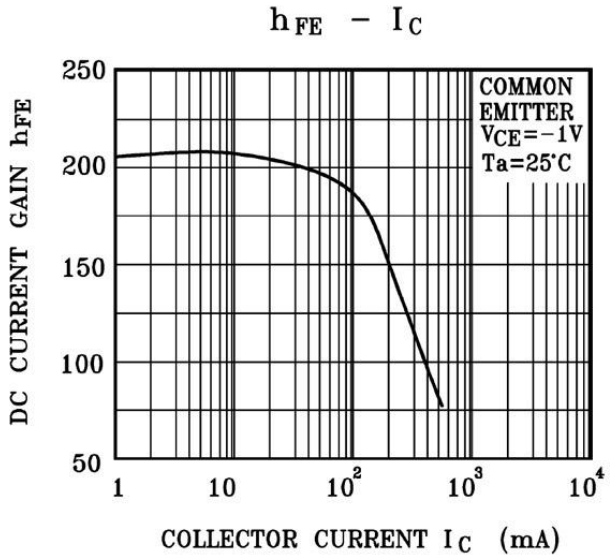
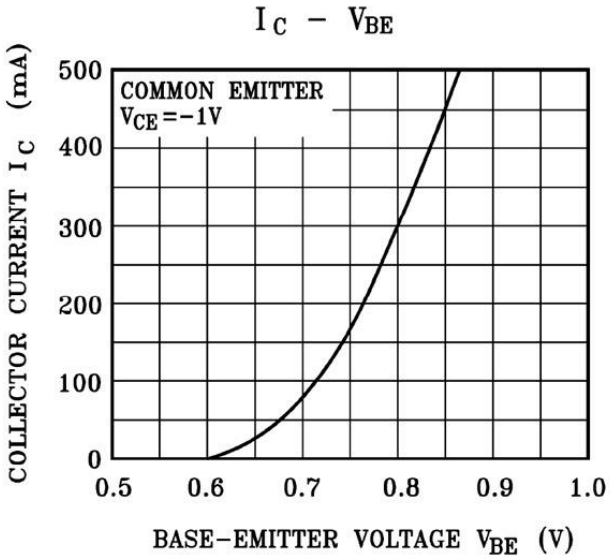
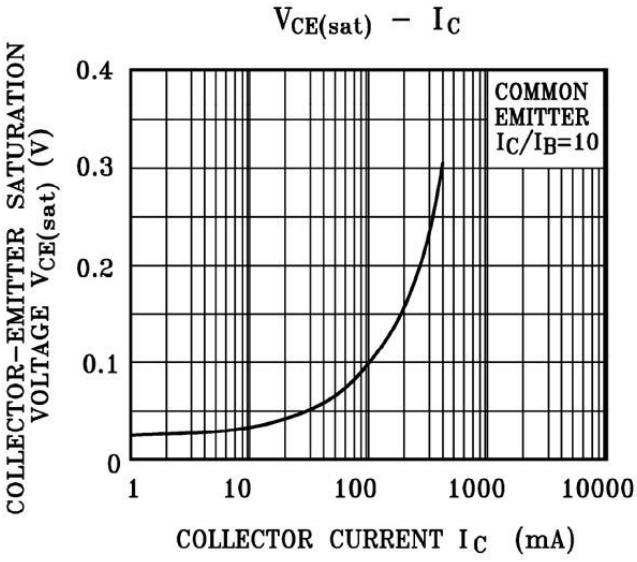
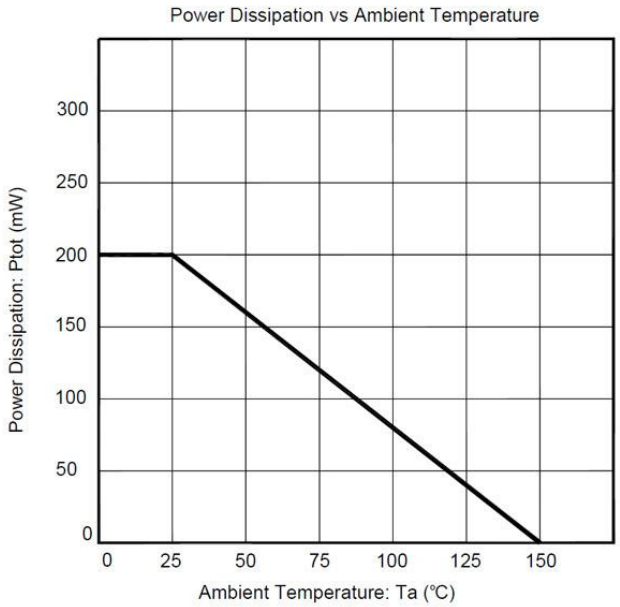
RATINGS AND CHARACTERISTIC CURVES BC807









Note: Specifications are subject to change without notice.