

PNP Transistors

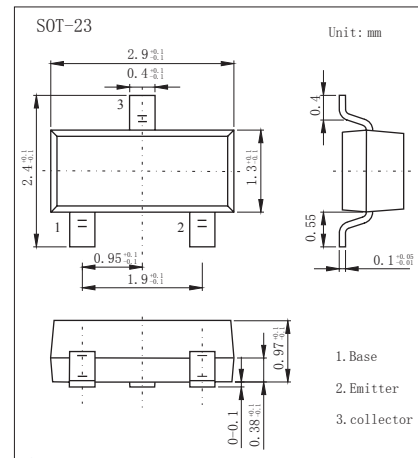
BC808 (KC808)

■ Features

- High collector current.
- High current gain.
- Low collector-emitter saturation voltage.
- Complementary NPN type available(BC818)

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-30	V
Collector-emitter voltage	V_{CEO}	-25	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current (DC)	I_C	-800	mA
Power dissipation	P_D	300	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-65 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-to-base breakdown voltage	V_{CBO}	$I_C = -100\mu\text{A}, V_{BE} = 0$	-30			V
Collector-to-emitter breakdown voltage	V_{CEO}	$I_C = -10\text{ mA}, I_B = 0$	-25			V
Emitter-to-base breakdown voltage	V_{EBO}	$I_E = -100\mu\text{A}, I_C = 0$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB} = -25\text{ V}, V_{BE} = 0$			-100	nA
Emitter cutoff current	I_{EBO}	$V_{EB} = -4\text{ V}, I_C = 0$			-100	nA
DC current gain *	h_{FE}	$I_C = -100\text{ mA}, V_{CE} = -1\text{ V}$	100		630	
		$I_C = -300\text{ mA}, V_{CE} = -1\text{ V}$	60			
Collector saturation voltage *	$V_{CE(sat)}$	$I_C = -500\text{ mA}, I_B = -50\text{ mA}$			-0.7	V
Base emitter on voltage	$V_{BE(on)}$	$V_{CE} = -1\text{ V}, I_C = 300\text{ mA}$			-1.2	V
Output Capacitance	C_{ob}	$V_{CB} = -10\text{ V}, f = 1\text{ MHz}$			12	pF
Transition frequency	f_T	$I_C = -10\text{ mA}, V_{CE} = -5\text{ V}, f = 50\text{ MHz}$		100		MHz

* Pulsed: $PW \leq 350\text{ us}, \text{duty cycle} \leq 2\%$

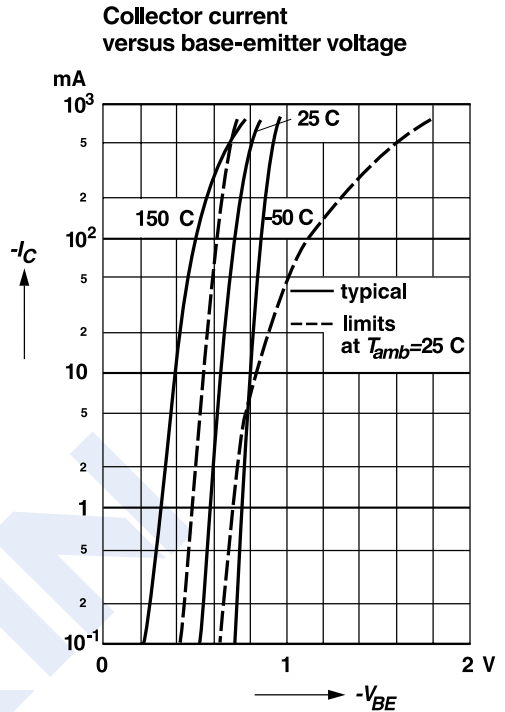
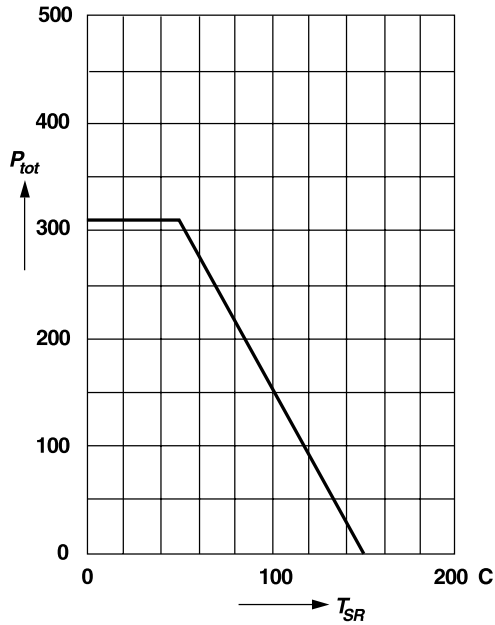
■ Marking

NO.	BC808-16	BC808-25	BC808-40
Marking	5E	5F	5G
h_{FE}	100 ~ 250	160 ~ 400	250 ~ 630

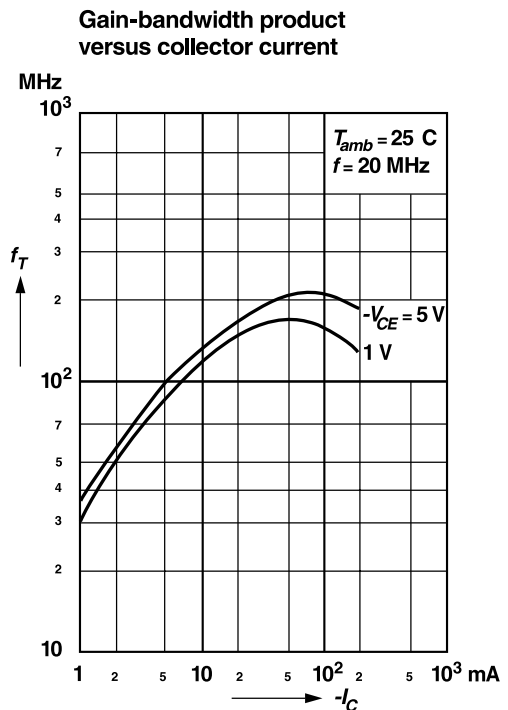
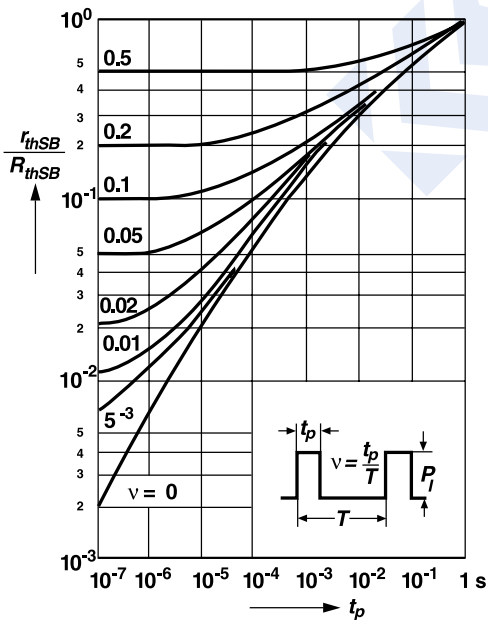
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■ Typical Characteristics

Admissible power dissipation versus temperature of substrate backside
 Device on fiberglass substrate, see layout



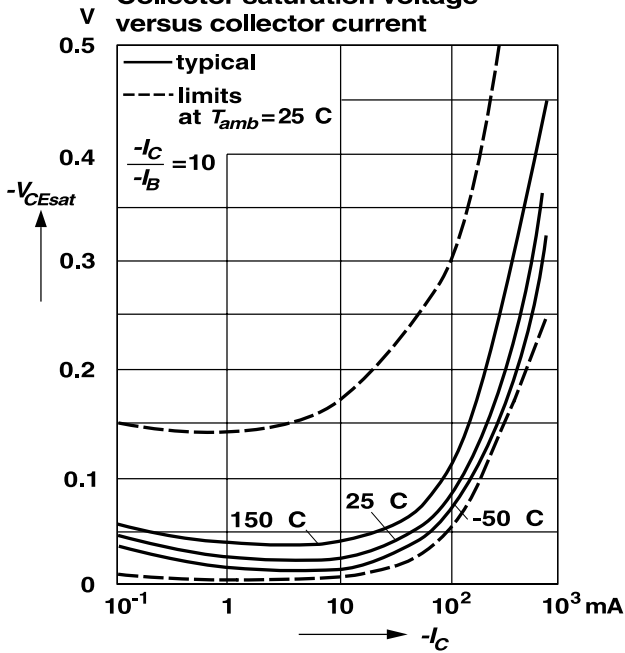
Pulse thermal resistance versus pulse duration (normalized)
 Device on fiberglass substrate, see layout



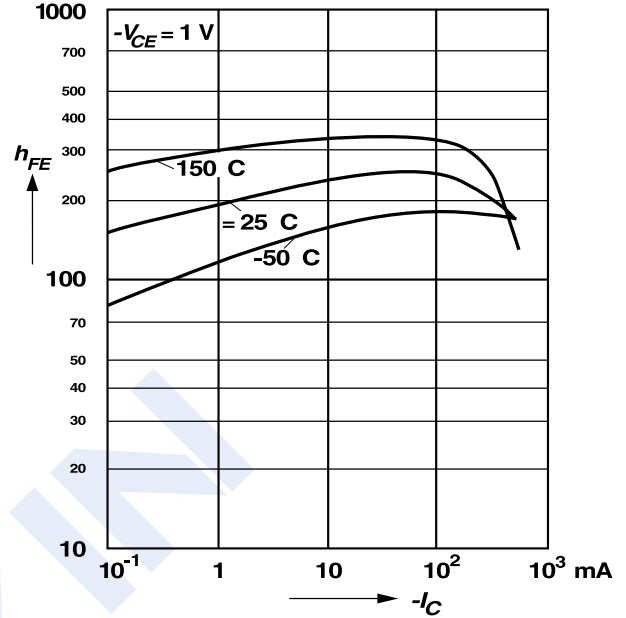
BC808 (KC808)

■ Typical Characteristics

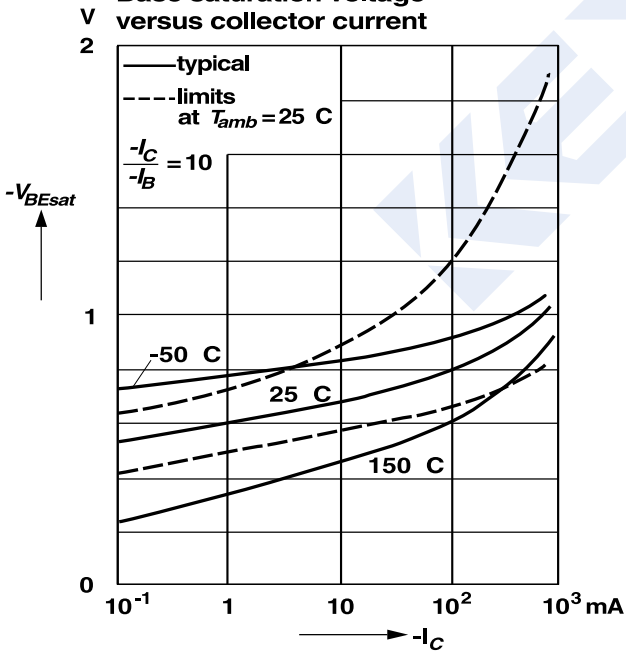
Collector saturation voltage versus collector current



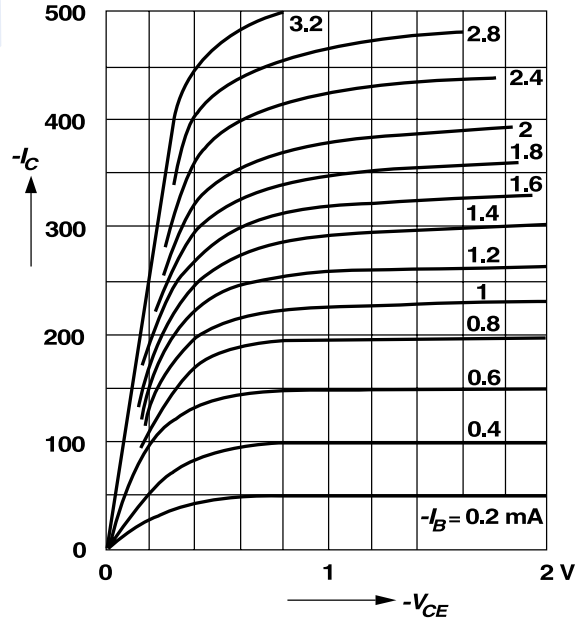
DC current gain versus collector current



Base saturation voltage versus collector current



Common emitter collector characteristics



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■ Typical Characteristics

