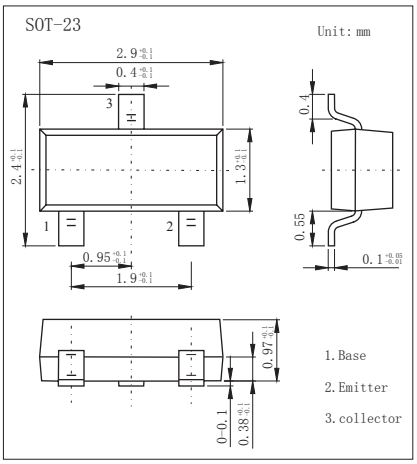
PNP Transistors

BC808-40



Features

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

Absolute Maximum Ratings Ta = 25℃

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	℃
Storage temperature	T_{stg}	-65 to +150	℃

Electrical Characteristics Ta = 25℃

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

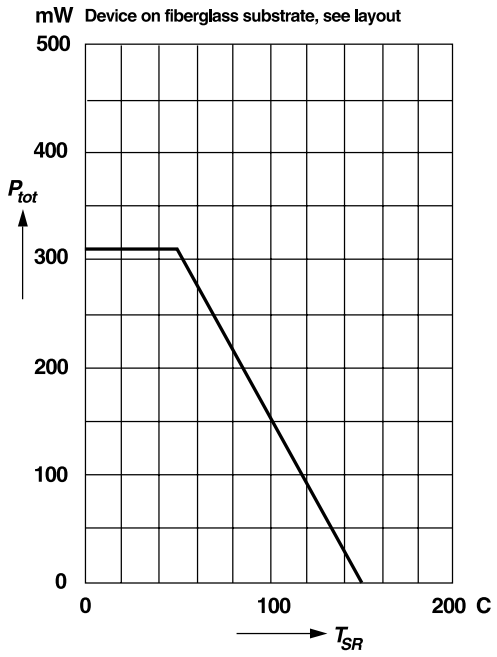
* Pulsed: PW ⩽ 350 us,duty cycle ⩽ 2%

Marking

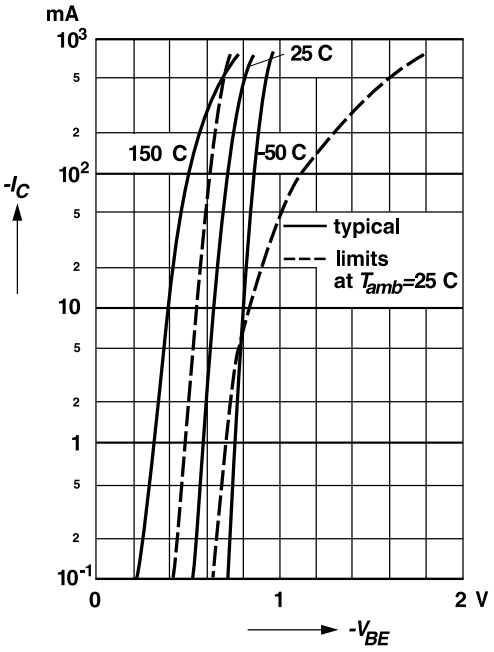
NO.	BC808-16	BC808-25	BC808-40
Marking	5E	5F	5G
hFE	100 ～250	160～400	250～630

■ Typical Characterisitics

Admissible power dissipation versus temperature of substrate backside

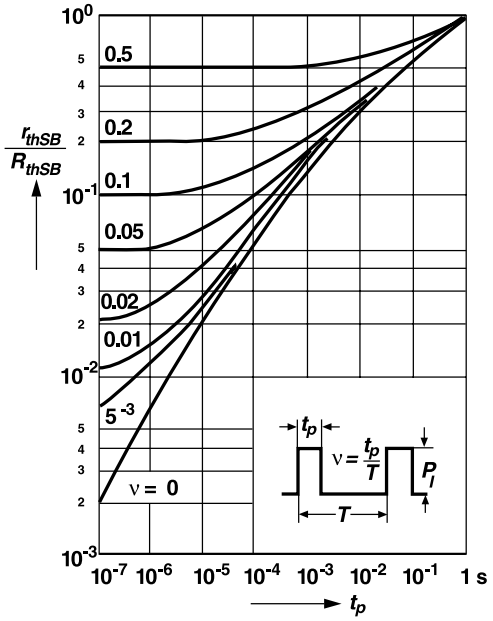


Collector current versus base-emitter voltage

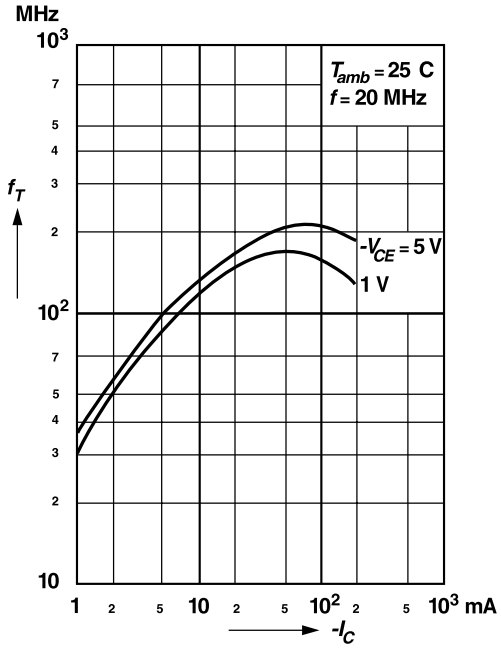


Pulse thermal resistance versus pulse duration (normalized)

Device on fiberglass substrate, see layout

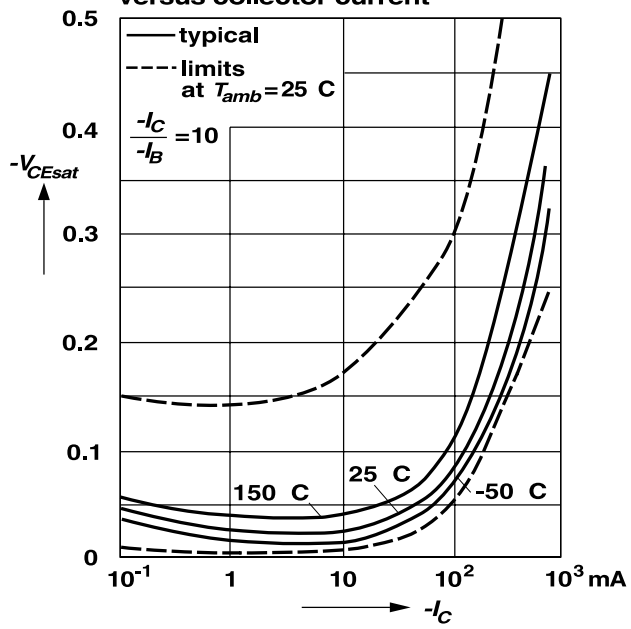


Gain-bandwidth product versus collector current

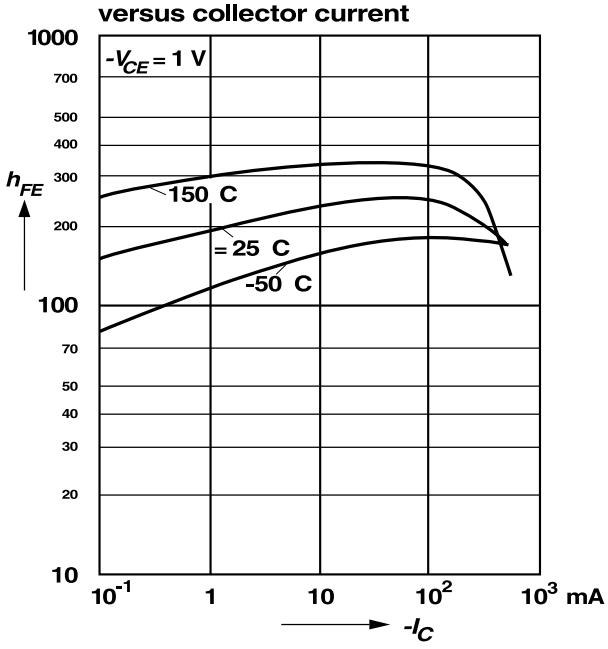


■ Typical Characterisitics

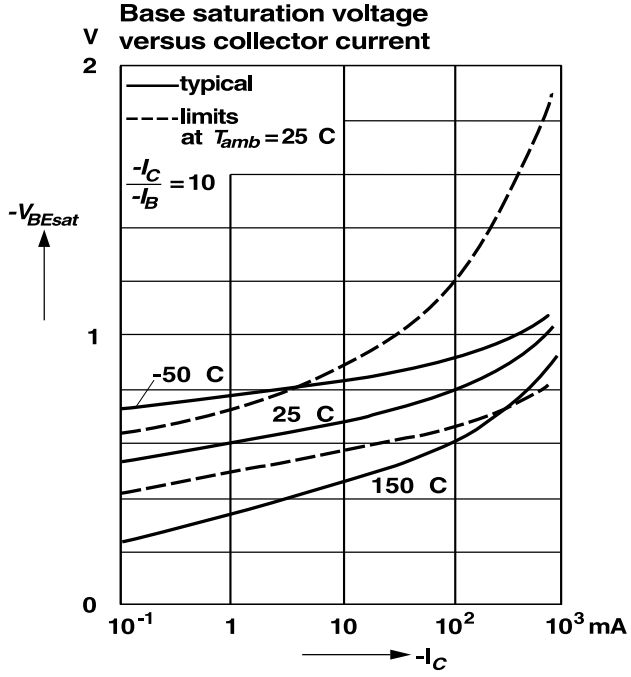
Collector saturation voltage versus collector current



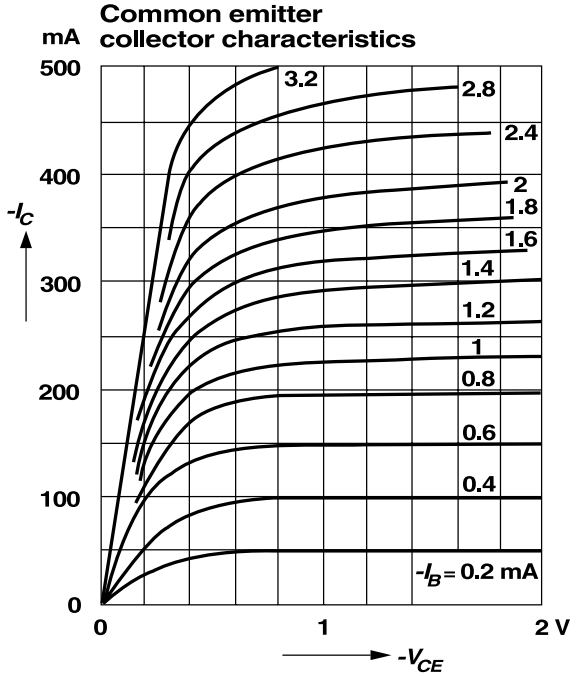
DC current gain versus collector current



Base saturation voltage versus collector current



Common emitter collector characteristics



■ Typical Characterisitics