

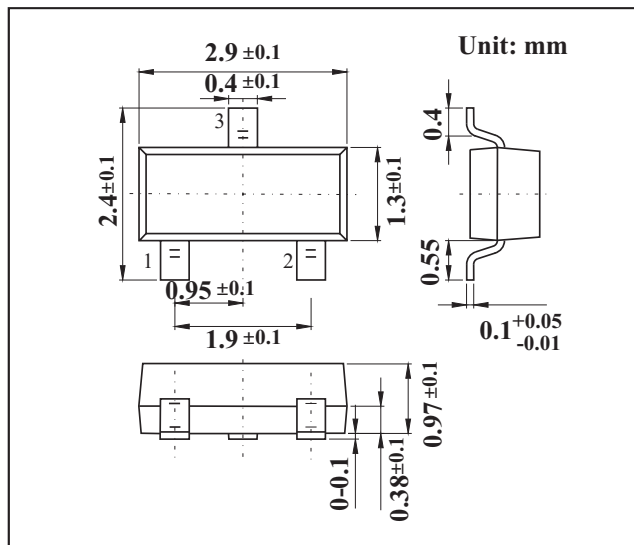
SOT-23 Plastic-Encapsulate Transistors

Features

- High collector current.
- High current gain.
- Low collector-emitter saturation voltage.
- PNP Silicon AF Transistors

MECHANICAL DATA

- Case style:SOT-23molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-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	310	mW
Junction temperature	T_J	150	°C
Storage temperature	T_{stg}	-65 to +150	°C

PACKAGE INFORMATION

Device	Package	Shipping
BC808	SOT-23	3000/Tape&Reel

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-to-baser breakdown voltage	V_{CB0}	$I_C = -10 \mu A, V_{BE} = 0$	-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}	$I_E = -10 \mu A, I_C = 0$	-5			V
Collector cutoff current	I_{CES}	$V_{CB} = -25 V, V_{BE} = 0$			-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: $PW \leq 350 \mu s$, duty cycle $\leq 2\%$

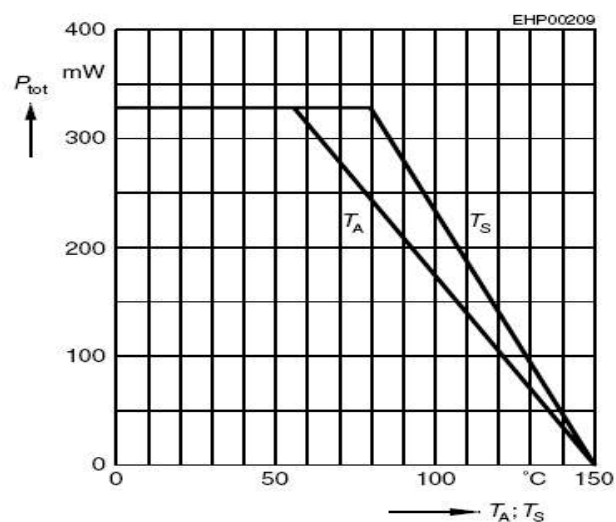
Marking

NO.	KC808-16	KC808-25	KC808-40
Marking	9GA	9GB	9GC
h_{FE}	100 ~ 250	160 ~ 400	250 ~ 630

RATINGS AND CHARACTERISTIC CURVES

Total power dissipation $P_{\text{tot}} = f(T_A^*; T_S)$

* Package mounted on epoxy



Transition frequency $f_T = f(I_C)$

$V_{CE} = 5V$

