

FEATURES

Suitable for AF-Driver stages and low power output stages

Complement to BC818

BC808-16	BC808-25	BC808-40
5E	5F	5G

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-30	V
DCollector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	800	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

BC808-16 (PNP)

BC808-25 (PNP)

BC808-40 (PNP)


ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C=-100\mu A, I_E=0$	-30			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C=-10mA, I_B=0$	-25			V
Emitter-base breakdown voltage	V_{EBO}	$I_E=-100\mu A, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-25V, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-4V, I_C=0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-1V, I_C=-100mA$	100		630	
	$h_{FE(2)}$	$V_{CE}=-1V, I_C=-300mA$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-500mA, I_B=-50mA$			-0.7	V
Base-emitter voltage	V_{BE}	$V_{CE}=-1V, I_C=-300mA$			-1.2	V
Transition frequency	f_T	$V_{CE}=-5V, I_C=-10mA, f=50MHz$		100		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10V, I_E=0, f=1MHz$		12		pF

 CLASSIFICATION OF h_{FE}

Rank	5E	5F	5G
Range	100-250	160-400	250-630

BC808-16
BC808-25 Typical Characteristics
BC808-40

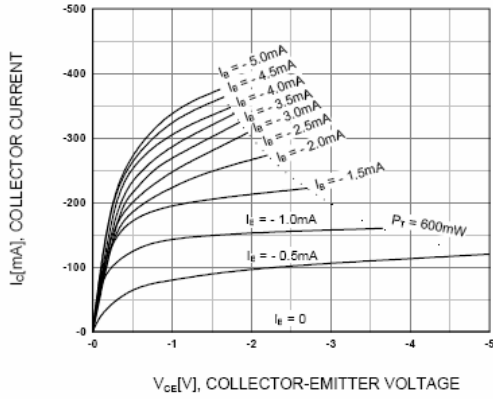


Figure 1. Static Characteristic

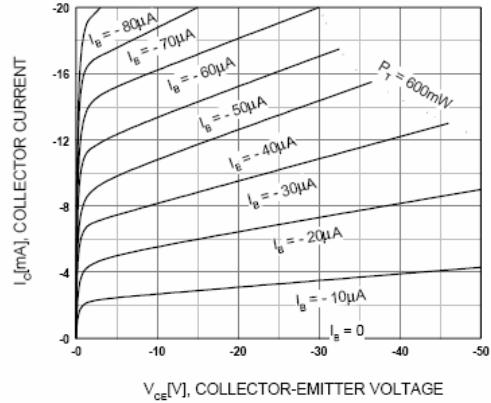


Figure 2. Static Characteristic

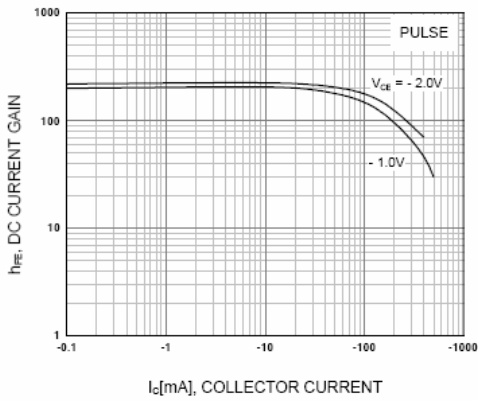


Figure 3. DC current Gain

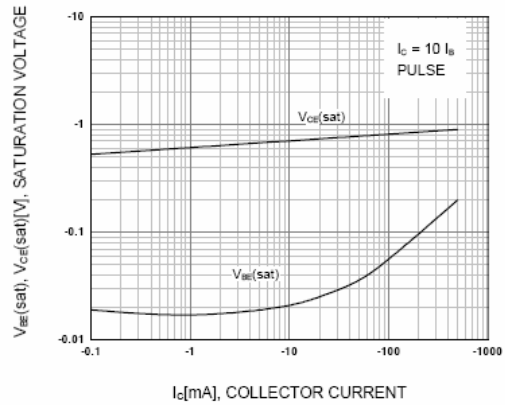


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

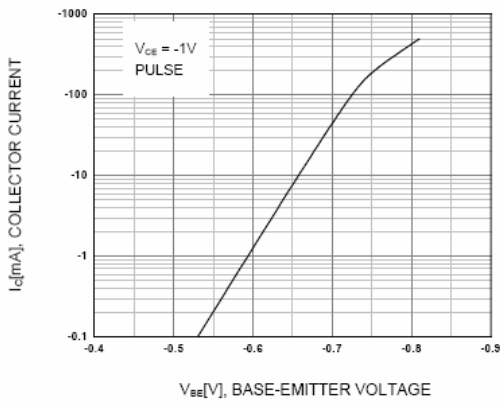


Figure 5. Base-Emitter On Voltage

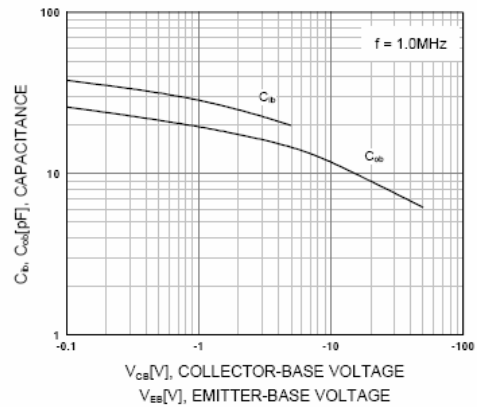


Figure 6. Input Output Capacitance