

Silicon PNP Transistor

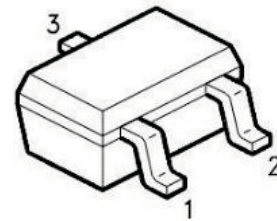
Small and medium-sized power amplifier ,
medium power drive and switching applications

1: base 2: emitter 3: collector

HFE(1) :Classification

Rank	BC807-16W	BC807-25W	BC807-40W
Range	100-250	160-400	250-600
Marking	5A	5B	5C

SOT-323



Maximum ratings(Ta=25°C unless otherwise noted)

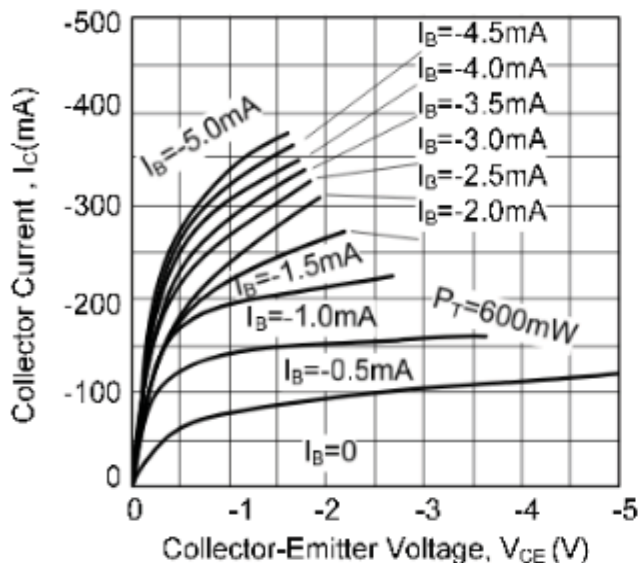
Parameter	Symbol	Value	Unit
Collector-Base Breakdown Voltage	V _{CB0}	-50	V
Collector-Emitter Breakdown Voltage	V _{CEO}	-45	V
Emitter-Base Breakdown Voltage	V _{EBO}	-5	V
Collector Current	I _C	-500	mA
Collector Power Dissipation	P _c	300	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-65~150	°C

Electrical Characteristics (Ta=25°C unless otherwise noted)

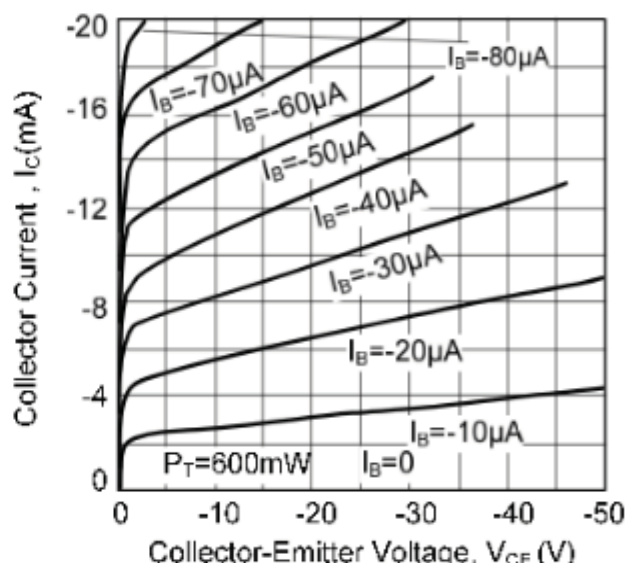
Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	V _{CB0}	I _E =-10uA I _E =0	-50		V
Collector-Emitter Breakdown Voltage	V _{CEO}	I _C =-10mA I _B =0	-45		V
Emitter-Base Breakdown Voltage	V _{EBO}	I _E =-10uA I _C =0	-5		V
Collector Cutoff Current	I _{CBO}	V _{CB} =-45V I _E =0		-0.1	uA
Collector-Emitter Current	I _{CES}	V _{CE} =-25V I _B =0		-0.1	uA
Emitter Cutoff Current	I _{EBO}	V _{EB} =-4V I _C =0		-0.1	uA
DC Current Gain	HFE (1)	V _{CE} =-1V I _C =-100mA	100	600	
	HFE (2)	V _{CE} =-1V I _C =-500mA	40		
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =-500mA I _B =-50mA		-0.7	V
Collector-Base Saturation Voltage	V _{BE(sat)}	I _C =-500mA I _B =-50mA		-1.2	V
transition frequency	f _T	V _{CE} =-5V I _C =-10mA f=100MHZ	100		MHZ

RATING AND CHARACTERISTICS CURVES (BC807-16W/25W/40W)

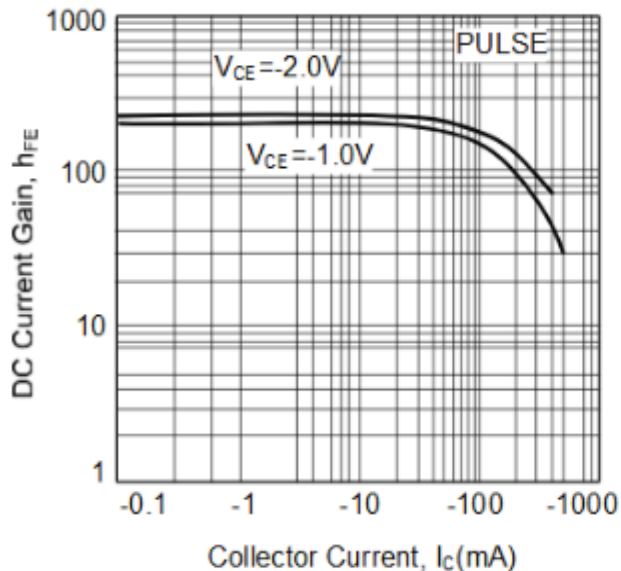
Static Characteristic



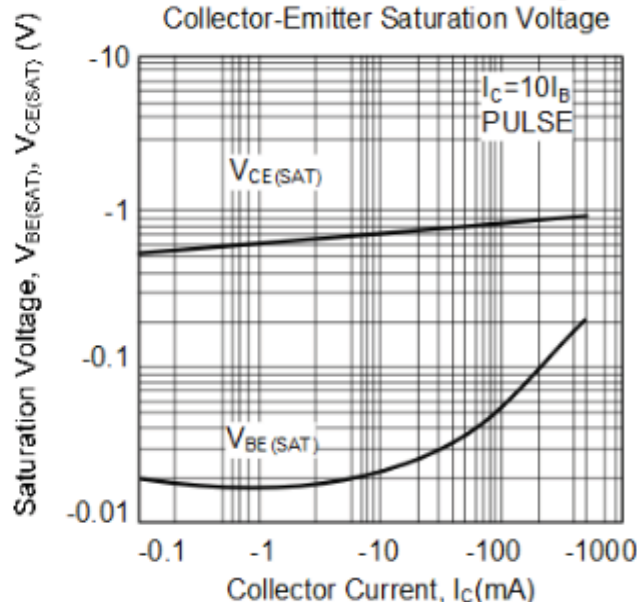
Static Characteristic



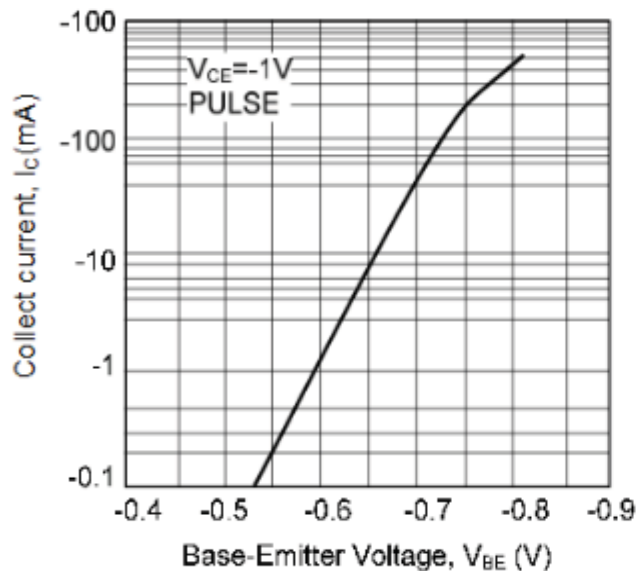
DC Current Gain



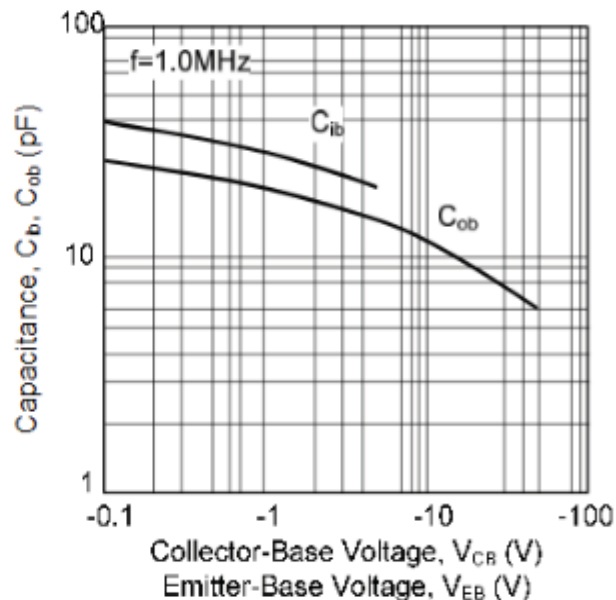
Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage



Base-Emitter On Voltage



Input Output Capacitance



DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.