



Micro Commercial Components



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20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

BC857BM

PNP Plastic-Encapsulate Transistors

Features

- Halogen free available upon request by adding suffix "-HF"
- Low Current
- Low Voltage
- Ultra-small Surface Mount Package
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking:D2

Maximum Ratings @ 25°C Unless Otherwise Specified

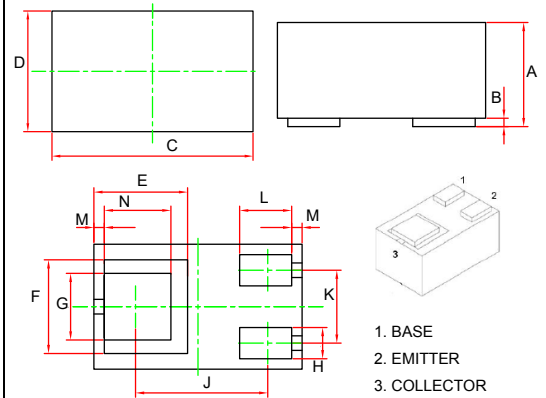
Symbol	Rating	Rating	Unit
V _{CEO}	Collector-Emitter Voltage	-45	V
V _{CBO}	Collector-Base Voltage	-50	V
V _{EBO}	Emitter-Base Voltage	-6	V
I _C	Collector Current	-100	mA
R _{θJA}	Thermal Resistance Junction to Ambient	1250	°C/W
T _J	Operating Junction Temperature	-55 to +150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage (I _C =-10mA, I _B =0)	-45	---	---	Vdc
V _{(BR)CBO}	Collector-Base Breakdown Voltage (I _C =-10mA, I _E =0)	-50	---	---	Vdc
V _{(BR)EBO}	Collector-Emitter Breakdown Voltage (I _E =-10mA, I _C =0)	-6	---	---	Vdc
I _{CBO}	Collector Cutoff Current (V _{CB} =-30Vdc, I _E =0Vdc)	---	---	-15	nA
I _{EBO}	Emitter Cutoff Current (V _{EB} =-5Vdc, I _C =0Vdc)	---	---	-15	nA
h _{FE}	DC Current Gain (I _C =-2mA, V _{CE} =-5Vdc)	220	---	475	---
V _{CE(sat)}	Collector-Emitter Saturation Voltage * (I _C =-10mA, I _B =-0.5mA) (I _C =-100mA, I _B =-5mA)	---	---	-200 -400	mVdc
V _{BE(sat)}	Base-Emitter Saturation Voltage * (I _C =-10mA, I _B =-0.5mA) (I _C =-100mA, I _B =-5mA)	---	-700 -900	---	mVdc
V _{BE}	Base-Emitter Voltage * (I _C =-2mA, V _{CE} =-5Vdc) (I _C =-10mA, V _{CE} =-5Vdc)	---	---	-700 -770	mVdc
f _T	Transition Frequency (V _{CE} =-5Vdc, I _C =-10mA, f=100MHz)	100	---	---	MHz
C _{ob}	Output Capacitance (V _{CB} =-10Vdc, f=1.0MHz, I _E =0)	---	2.5	---	pF
NF	Noise Figure (V _{CE} =-5V, I _E =-0.2mA, f=1kHz, R _S =1kΩ, B=200Hz)	---	10	---	dB

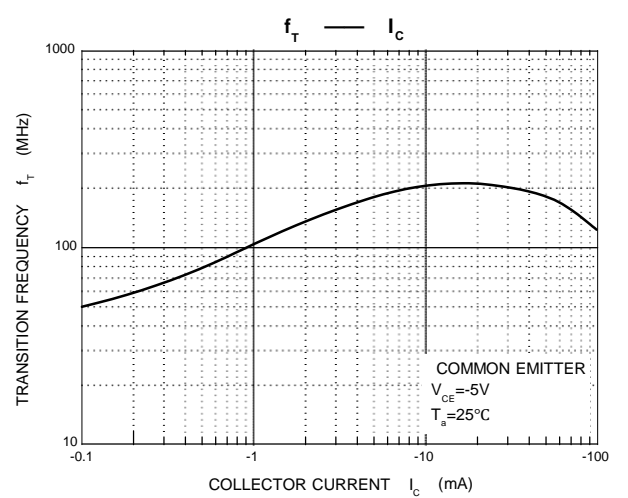
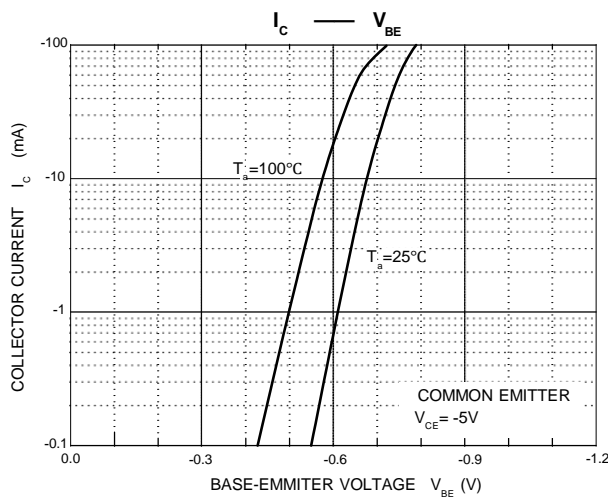
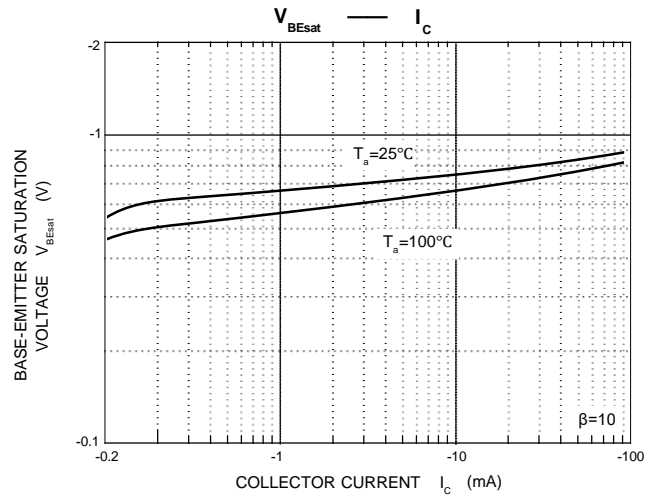
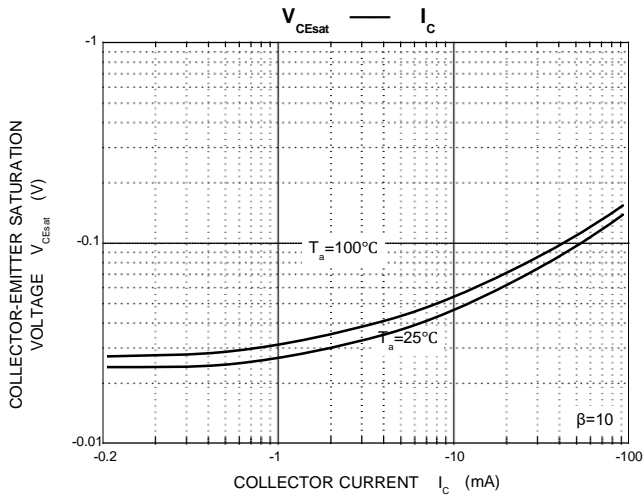
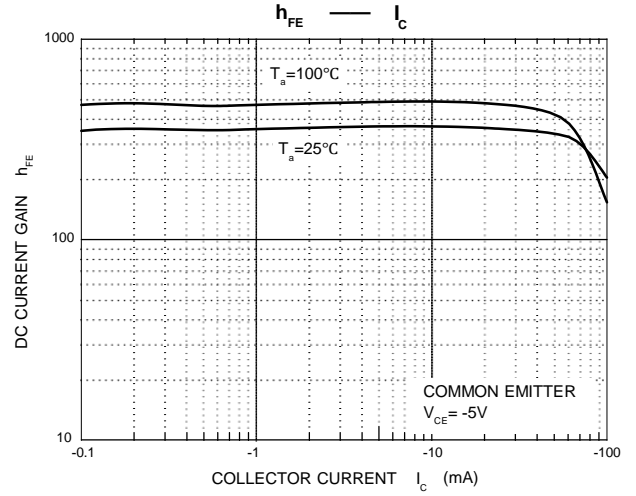
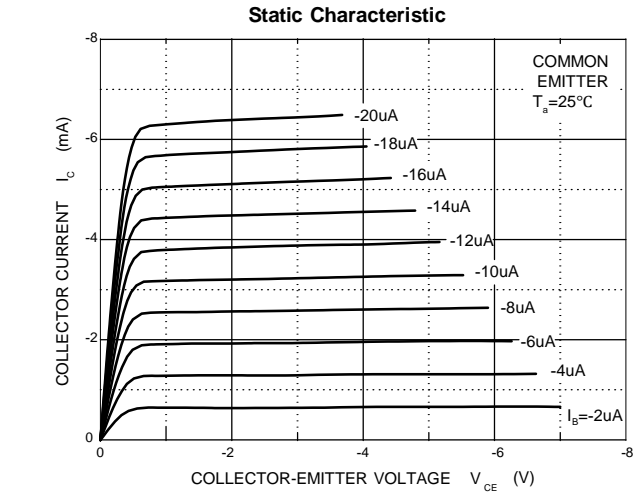
*Pulse test: pulse width ≤300μs, duty cycles ≤2.0%.

SOT-883

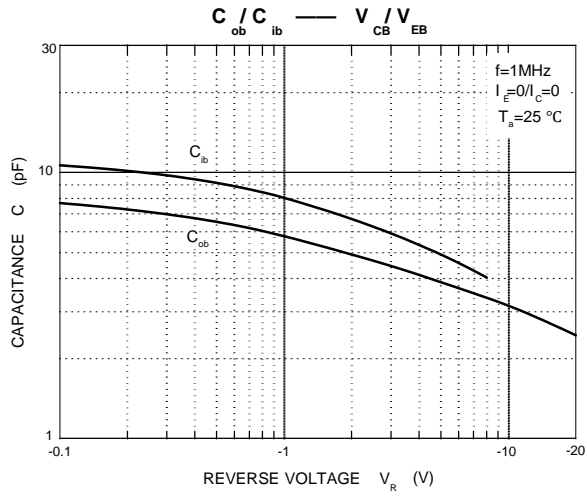


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.018	0.022	0.450	0.550	
B	0.000	0.004	0.010	0.100	
C	0.037	0.041	0.950	1.050	
D	0.022	0.026	0.550	0.650	
E	0.018REF.		0.450REF.		
F	0.018REF.		0.450REF.		
G	0.011	0.015	0.270	0.370	
H	0.004	0.008	0.100	0.200	
J	0.025REF.		0.635REF.		
K	0.012	0.016	0.300	0.400	
L	0.008	0.012	0.200	0.300	
M	0.002REF.		0.050REF.		
N	0.011	0.015	0.270	0.370	

Typical Characteristics



Typical Characteristics





Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 10Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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