



**THE DATASHEET OF
2SB857-D-BP**





Micro Commercial Components



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2SB857-B
2SB857-C
2SB857-D

Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Low Frequency Power Amplifier
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{CBO}	Collector-Base Voltage	-70	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-4	A
P_C	Collector power dissipation	2.0	W
T_J	Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Type	Max	Units
OFF CHARACTERISTICS					
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=-50\text{mA}$, $I_B=0$)	-50	---	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=-10\mu\text{A}$, $I_E=0$)	-70	---	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=-10\mu\text{A}$, $I_C=0$)	-5	---	---	Vdc
I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=-50\text{Vdc}$, $I_E=0$)	---	---	-1	μA
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=-5\text{Vdc}$, $I_C=0$)	---	---	-1	μA

ON CHARACTERISTICS

h_{FE}	Forward Current Transfer ratio ($I_C=-1\text{A}$, $V_{CE}=-4\text{Vdc}$)	60	---	320	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=-2\text{mA}$, $I_B=-200\text{mA}$)	---	---	-1	Vdc
V_{BE}	Base-Emitter Voltage ($I_C=-1\text{A}$, $V_{CE}=-4\text{Vdc}$)	---	---	-1	Vdc
f_T	Transition frequency ($V_{CE}=-4\text{Vdc}$, $I_C=-500\text{mA}$)	---	15	---	MHz

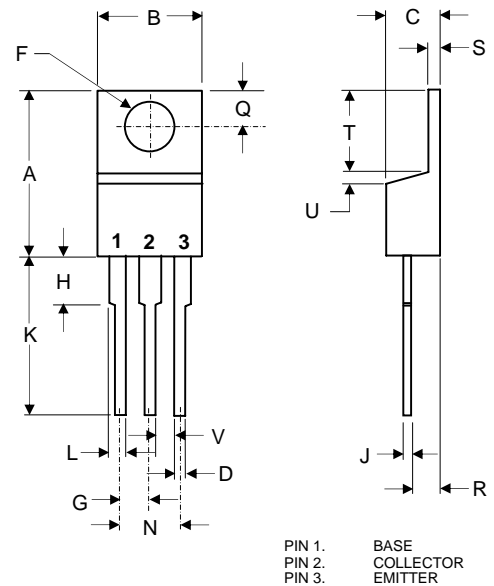
Classification OF h_{FE}

Rank	B	C	D
Range	60-120	100-200	160-320

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

PNP Silicon Power Transistors

TO-220



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.140	.190	3.56	4.82	
D	.020	.045	0.51	1.14	
F	.139	.161	3.53	4.09	∅
G	.190	.110	2.29	2.79	
H	---	.250	---	6.35	
J	.012	.025	0.30	0.64	
K	.500	.580	12.70	14.73	
L	.045	.060	1.14	1.52	
N	.190	.210	4.83	5.33	
Q	.100	.135	2.54	3.43	
R	.080	.115	2.04	2.92	
S	.045	.055	1.14	1.39	
T	.230	.270	5.84	6.86	
U	-----	.050	-----	1.27	
V	.045	-----	1.15	-----	

Ordering Information :

Device	Packing
Part Number-BP	Bulk; 1Kpcs/Box

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

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