



2SB1386-P

2SB1386-Q

2SB1386-R

Features

- Low Collector Saturation Voltage
- Excellent current-to-gain characteristics
- 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
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{CBO}	Collector-Base Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-6.0	V
I_C	Collector Current	-2.0	A
P_C	Collector power dissipation	0.5	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

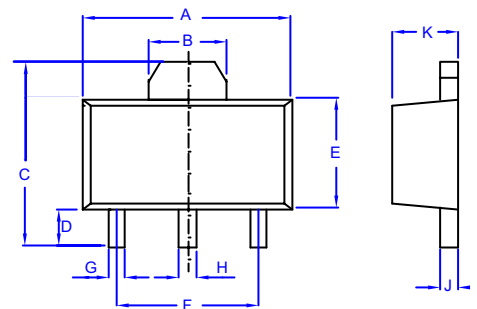
Symbol	Parameter	Min	Typ	Max	Units
$V_{(BR)CBO}$	Collector-base Breakdown Voltage ($I_C = -50\mu A$, $I_E = 0$)	-30	---	---	Vdc
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C = -1mA$, $I_B = 0$)	-20	---	---	Vdc
$V_{(BR)EBO}$	Emitter-base Breakdown Voltage ($I_E = -50\mu A$, $I_C = 0$)	-6	---	---	Vdc
I_{CBO}	Collector-Base Cutoff Current ($V_{CB} = -20Vdc$, $I_E = 0$)	---	---	-0.5	μA
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB} = -5Vdc$, $I_C = 0$)	---	---	-0.5	μA
$h_{FE(1)}$	DC Current Gain ($I_C = -0.5Adc$, $V_{CE} = -2.0Vdc$)	82	---	390	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C = -4Adc$, $I_B = -0.1Adc$)	---	---	-1.0	Vdc
f_T	Transition Frequency ($V_{CE} = -6Vdc$, $I_C = -50mA$, $f = 30MHz$)	---	120	---	MHz
C_{ob}	Collector output capacitance ($V_{CB} = -20Vdc$, $I_E = 0$, $f = 1.0MHz$)	---	60	---	pF

CLASSIFICATION OF H_{FE} (1)

Rank	P	Q	R
Range	82-180	120-270	180-390
Marking	BHP	BHQ	BHR

PNP Silicon Epitaxial Transistors

SOT-89



1. Emitter
2. Collector
3. Base

DIMENSINS					
DIM	INCHES		MM		NOTES
	MIN	MAX	MIN	MAX	
A	.173	.181	4.39	4.60	
B	.061	-----	1.55	-----	REF.
C	.154	.165	3.91	4.25	
D	.031	.039	0.80	1.00	
E	.092	.100	2.34	2.54	
F	.118	-----	3.00	-----	TYP
G	.013	.019	0.33	0.48	
H	.015	.021	0.38	0.53	
J	.015	.016	0.38	0.41	
K	.055	.063	1.40	1.60	

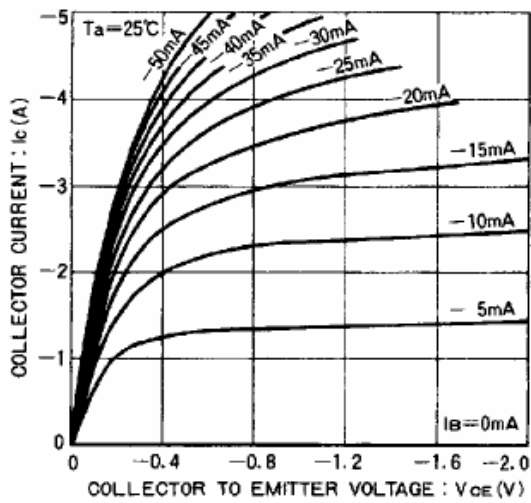


Figure 1

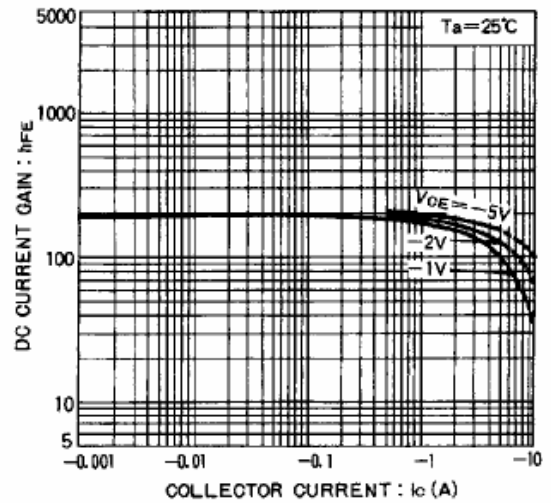


Figure 2

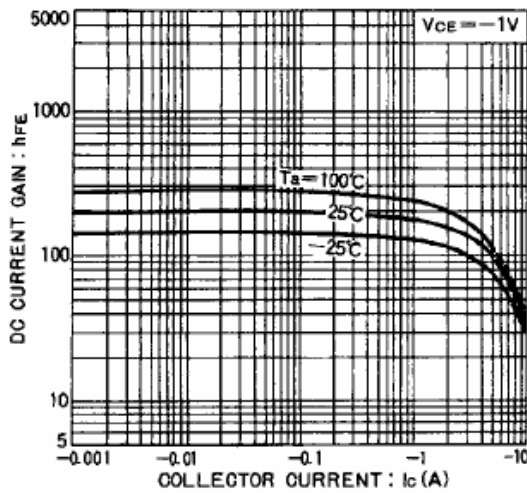


Figure 3

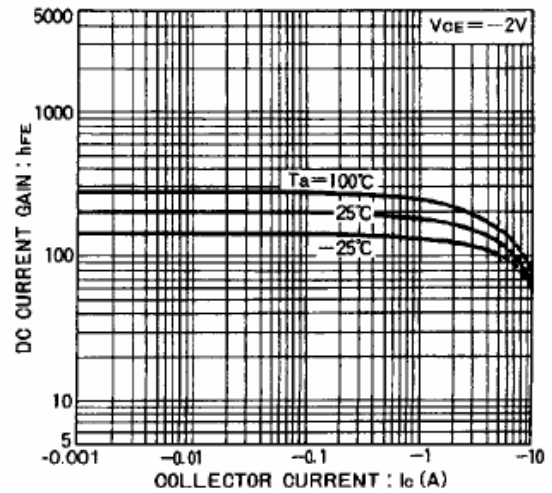


Figure 4

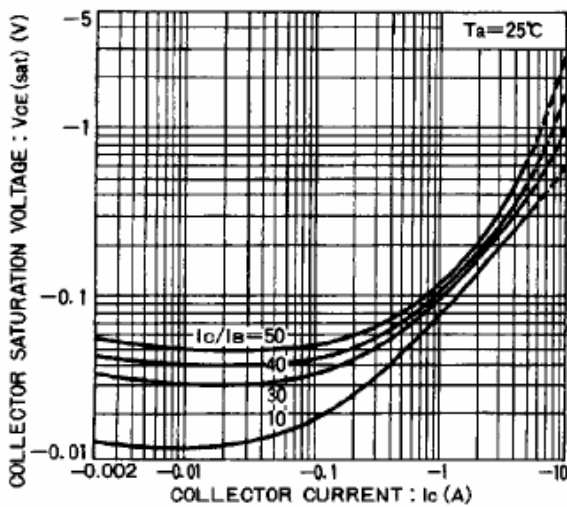


Figure 5

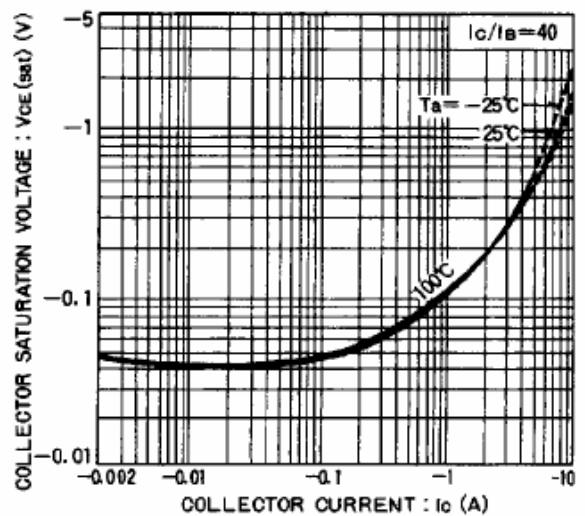


Figure 6

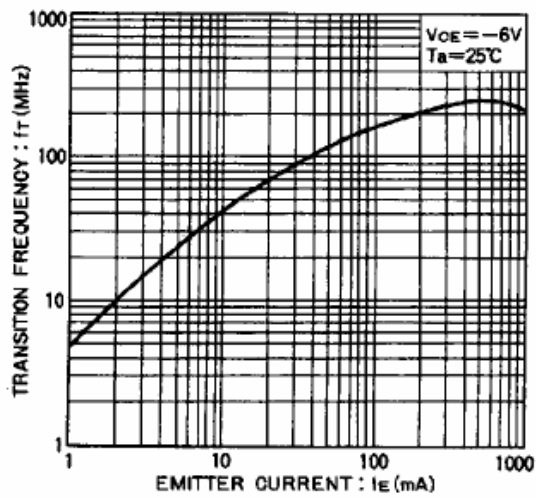


Figure 7

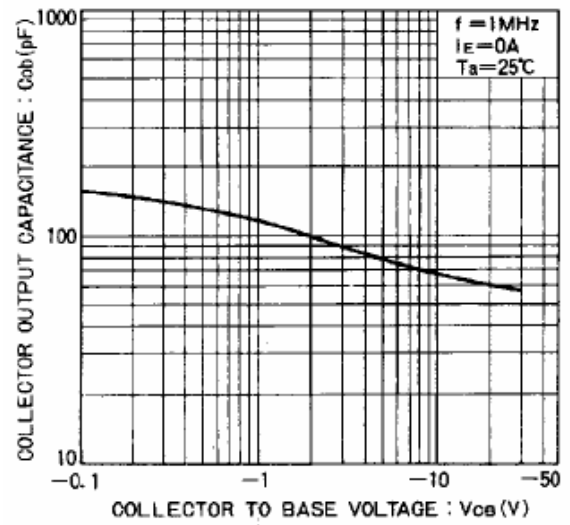


Figure 8

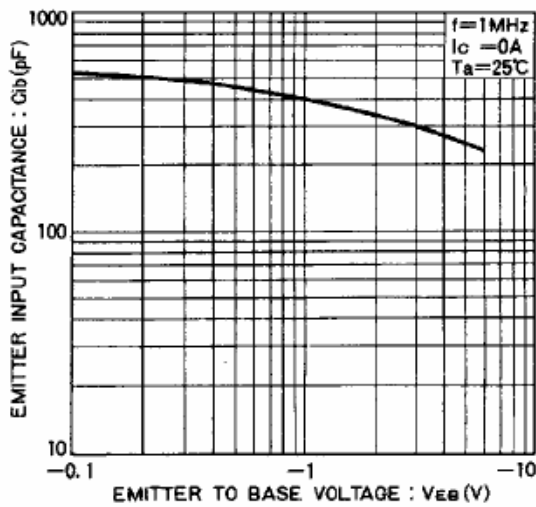


Figure 9

Ordering Information :

Device	Packing
Part Number-TP	Tape & Reel; 1 Kpcs / Reel

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

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