



Micro Commercial Components



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2SB1073-Q 2SB1073-R

Features

- Low collector to emitter saturation voltage $V_{CE(sat)}$
- Large peak collector current I_{CP}
- Mini power type 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
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings @ 25°C Unless Otherwise Specified

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{CBO}	Collector-Base Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_{CP}	Peak Collector Current	-7	A
I_C	Collector Current	-4	A
P_C	Collector Dissipation	1	W
T_J	Operating 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
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=-1mA_{dc}$, $I_B=0$)	-20	---	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=-10uA_{dc}$, $I_E=0$)	-30	---	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage ($I_E=-10uA_{dc}$, $I_C=0$)	-7	---	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=-30V_{dc}$, $I_E=0V_{dc}$)	---	---	-100	nA _{dc}
I_{EBO}	Emitter Cutoff Current ($V_{EB}=-7V_{dc}$, $I_C=0V_{dc}$)	---	---	-100	nA _{dc}
h_{FE}	DC Current Gain (note 1) ($I_C=-2A_{dc}$, $V_{CE}=-2V_{dc}$) (note 2)	120	---	315	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=-3A_{dc}$, $I_B=-0.1A_{dc}$) (note 2)	---	-0.6	-1	Vdc
f_T	Current Gain-Bandwidth Product ($V_{CB}=-6V_{dc}$, $I_E=-50mA_{dc}$, $f=200MHz$)	---	120	---	MHz
C_{ob}	Output Capacitance ($V_{CB}=-20V_{dc}$, $f=1.0MHz$, $I_E=0$)	---	40	---	pF

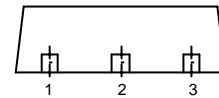
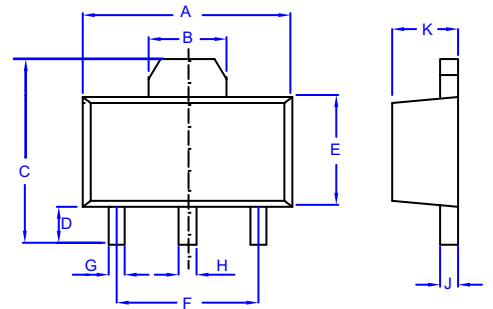
Note: 1. h_{FE} Rank Classification

Rank	Q	R
h_{FE}	120~205	180~315
Marking Symbol	IQ	IR

2. Pulse measurement

Silicon PNP epitaxial planer Transistors

SOT-89

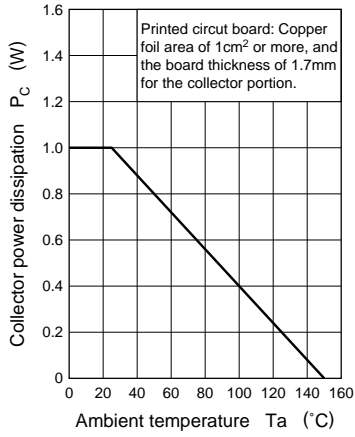


1.BASE
2.COLLECTOR
3.EMITTER

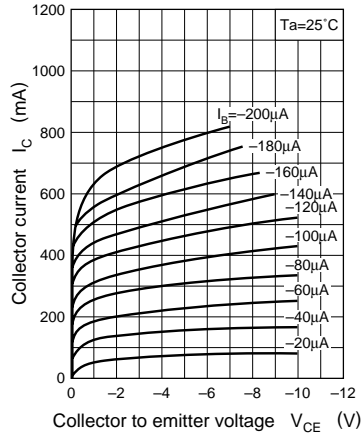
DIM	DIMENSINS				NOTES
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.173	.181	4.39	4.60	
B	.063	.071	1.60	1.80	
C	.154	.165	3.91	4.25	
D	.031	.039	0.80	1.00	
E	.092	.100	2.34	2.54	
F	.118	-----	3.00	-----	TYP
G	.013	.019	0.33	0.48	
H	.015	.021	0.38	0.53	
J	.015	.016	0.38	0.41	
K	.055	.063	1.40	1.60	

2SB1073

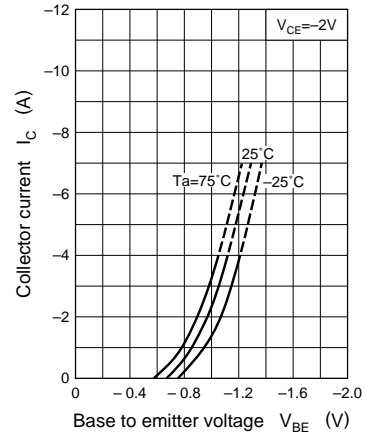
$P_C - T_a$



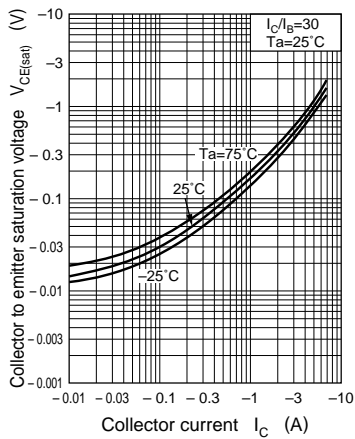
$I_C - V_{CE}$



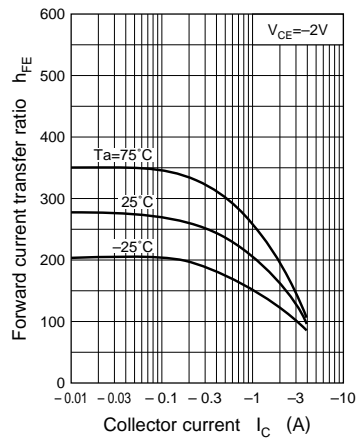
$I_C - V_{BE}$



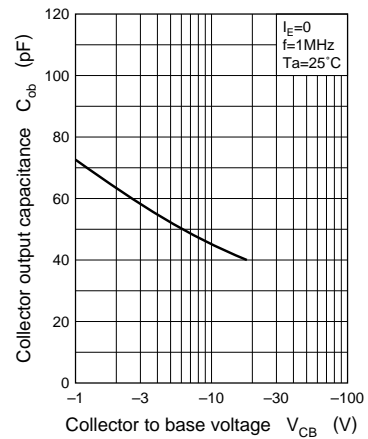
$V_{CE(sat)} - I_C$



$h_{FE} - I_C$



$C_{ob} - V_{CB}$





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Ordering Information :

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

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

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