Micro Commercial Components

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2SB1073-Q
2SB1073-R

Silicon
PNP epitaxial planer
Transistors

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
- Moisure 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	℃
T_{STG}	Storage Temperature	-55 to +150	℃

Electrical Characteristics @ 25°C Unless Otherwise Specified

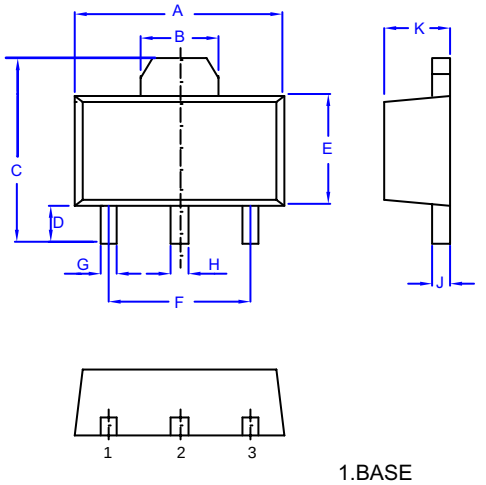
Symbol	Parameter	Min	Typ	Max	Units
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage (I_C=-1mAdc, I_B=0)	-20	---	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage (I_C=-10uAdc, I_E=0)	-30	---	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage (I_E=-10uAdc, I_C=0)	-7	---	---	Vdc
I_{CBO}	Collector Cutoff Current (V_{CB}=-30Vdc, I_E=0Vdc)	---	---	-100	nAdc
I_{EBO}	Emitter Cutoff Current (V_{EB}=-7Vdc, I_C=0Vdc)	---	---	-100	nAdc
h_{FE}	DC Current Gain (note 1) (I_C=-2Adc, V_{CE}=-2Vdc) (note 2)	120	---	315	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage (I_C=-3Adc, I_B=-0.1Adc) (note 2)	---	-0.6	-1	Vdc
f_T	Current Gain-Bandwidth Product (V_{CB}=-6Vdc, I_E=-50mAdc, f=200MHz)	---	120	---	MHz
C_{ob}	Output Capacitance (V_{CB}=-20Vdc, 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

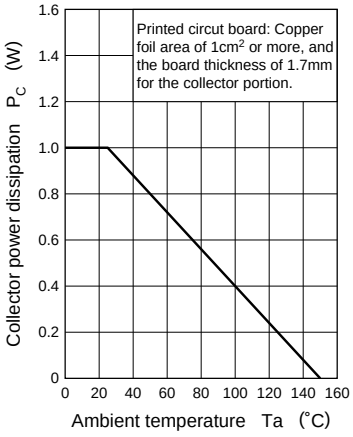
SOT-89



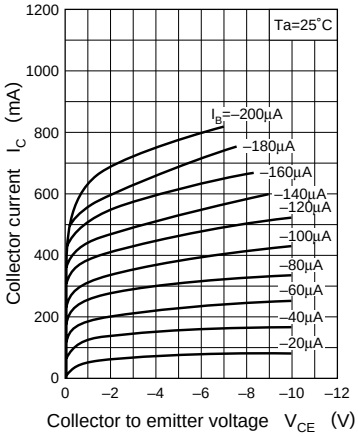
1.BASE
2.COLLECTOR
3.EMITTER

DIMENSINS					
DIM	INCHES		MM		NOTES
	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	

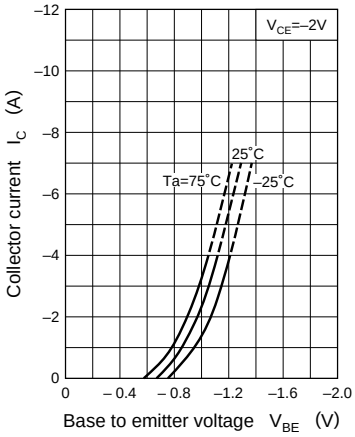
P_C — Ta



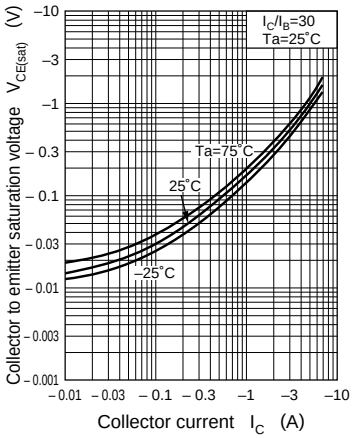
I_C — V_{CE}



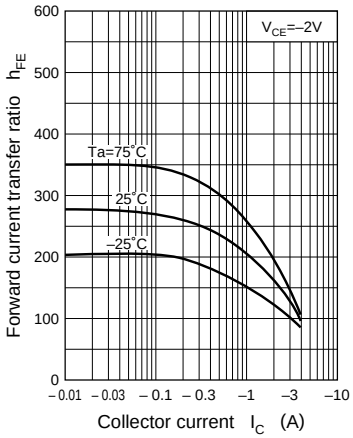
I_C — V_{BE}



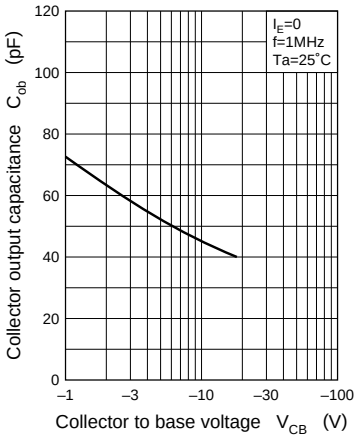
$V_{CE(sat)}$ — I_C



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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