Micro Commercial Components

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2SA1201-O
2SA1201-Y

PNP Silicon Power Transistors

Features

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

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{CBO}	Collector-Base Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-5.0	V
I_C	Collector Current	-800	mA
I_B	Base Current	-160	mA
P_C	Collector power dissipation	500 1000(Note 1)	W
T_J	Junction Temperature	150	℃
T_{STG}	Storage Temperature	-55 to +150	℃

Note 1: Mounted on ceramic substrate (250mm^2 x 0.8t)

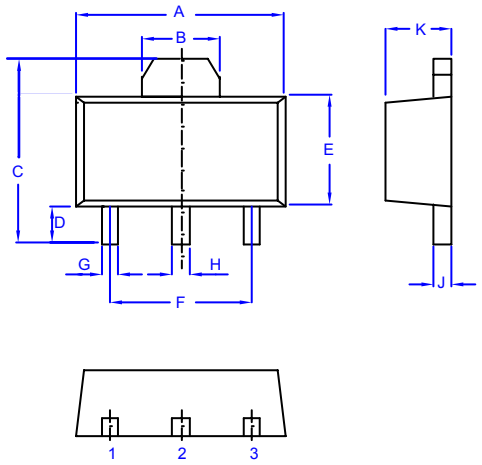
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ.	Max	Units
OFF CHARACTERISTICS					
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* (I_C=-10mAdc, I_B=0)	-120	---	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage* (I_E=-1mAdc, I_C=0)	-5	---		Vdc
I_{CBO}	Collector-Base Cutoff Current (V_{CB}=-120Vdc,I_E=0)	---	---	-0.1	uAdc
I_{EBO}	Emitter-Base Cutoff Current (V_{EB}=-5.0Vdc, I_C=0)	---	---	-0.1	uAdc
ON CHARACTERISTICS					
h_{FE}	Forward Current Transfer ratio (I_C=-0.1Adc, V_{CE}=-5.0Vdc) (Note 2)	80	---	240	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage (I_C=-0.5Adc, I_B=-50mAdc)	---	---	-1.0	Vdc
V_{BE}	Base-Emitter Voltage (I_C=-0.5Adc, V_{CE}=-5.0Vdc)	---	---	-1.0	Vdc
f_T	Transition Frequency (I_C=-0.1Adc, V_{CE}=-5.0Vdc)	---	120	---	MHz
C_{ob}	Collector Output Capacitance (V_{CB}=-10V, I_E=0, f=1MHz)	---	---	30	pF

CLASSIFICATION OF $H_{FE(1)}$

Rank	O	Y
Range	80-160	120-240
Marking	DO	DY

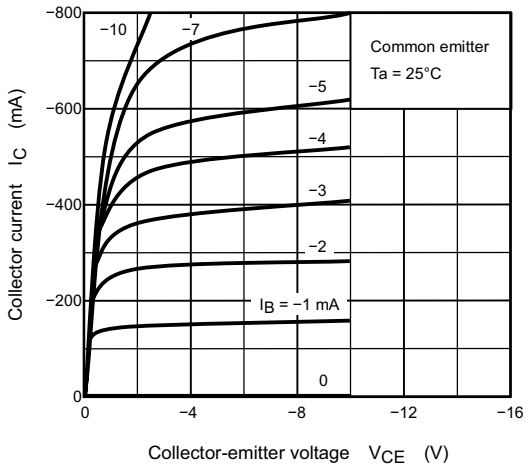
SOT-89



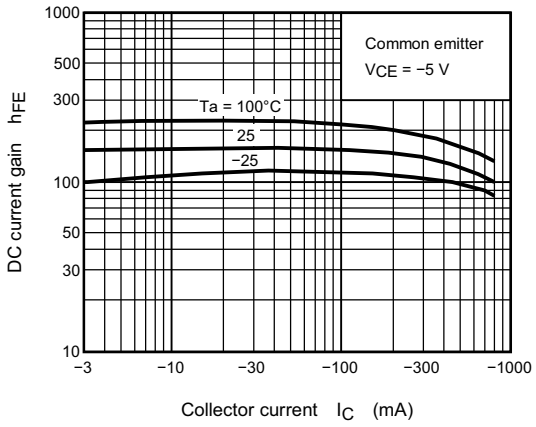
1.BASE
2.COLLECTOR
3.EMITTER

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	

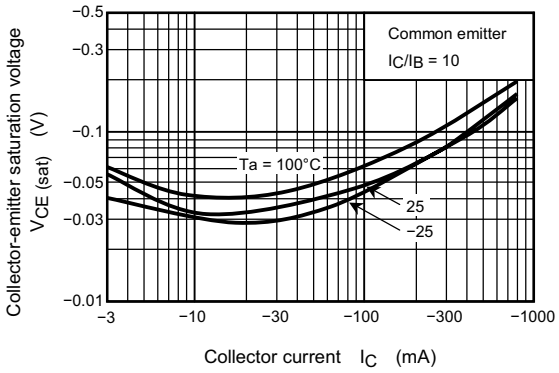
$I_C - V_{CE}$



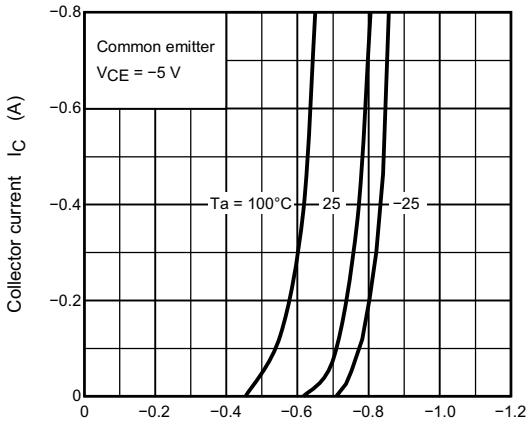
$h_{FE} - I_C$



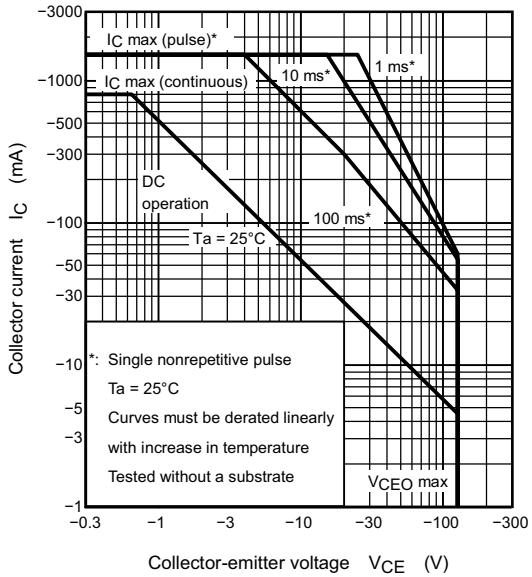
$V_{CE\ (sat)} - I_C$



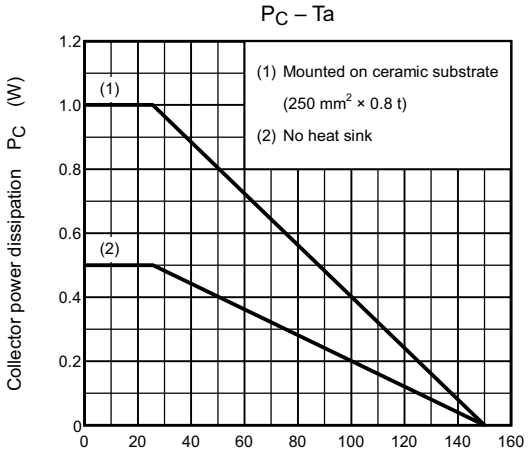
$I_C - V_{BE}$



Safe Operating Area



$P_C - Ta$



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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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