



Micro Commercial Components



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2SC2883-O

2SC2883-Y

Features

- Halogen free available upon request by adding suffix "-HF"
- Power amplifier applications
- 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

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	30	V
V_{CBO}	Collector-Base Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current	1500	mA
P_C	Collector power dissipation	500	mW
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
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OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ($I_C=10\text{mA}$, $I_E=0$)	30	---	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage* ($I_E=1\text{mA}$, $I_C=0$)	5	---	---	Vdc
I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=30\text{Vdc}$, $I_E=0$)	---	---	0.1	μA
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=5.0\text{Vdc}$, $I_C=0$)	---	---	0.1	μA

ON CHARACTERISTICS

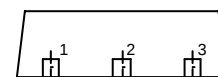
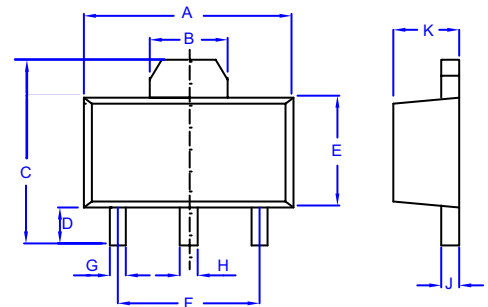
h_{FE}	Forward Current Transfer ratio ($I_C=0.5\text{A}$, $V_{CE}=2.0\text{Vdc}$)	100	---	320	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=1.5\text{A}$, $I_E=30\text{mA}$)	---	---	2.0	Vdc
V_{BE}	Base-Emitter Voltage ($I_C=0.5\text{A}$, $V_{CE}=2.0\text{Vdc}$)	---	---	1.0	Vdc
f_T	Transition Frequency ($I_C=0.5\text{A}$, $V_{CE}=2.0\text{Vdc}$)	---	120	---	MHz
C_{ob}	Collector Output Capacitance ($V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$)	---	---	40	pF

CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	100-200	160-320
Marking	GO	GY

NPN Silicon Power Transistors

SOT-89



- 1.BASE
- 2.COLLECTOR
- 3.EMITTER

DIMENSINS					
DIM	INCHES		MM		NOTES
	MIN	MAX	MIN	MAX	
A	.173	.181	4.39	4.60	REF.
B	.061	-----	1.55	-----	
C	.154	.165	3.91	4.25	
D	.031	.039	0.80	1.00	
E	.092	.100	2.34	2.54	TYP
F	.118	-----	3.00	-----	
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	

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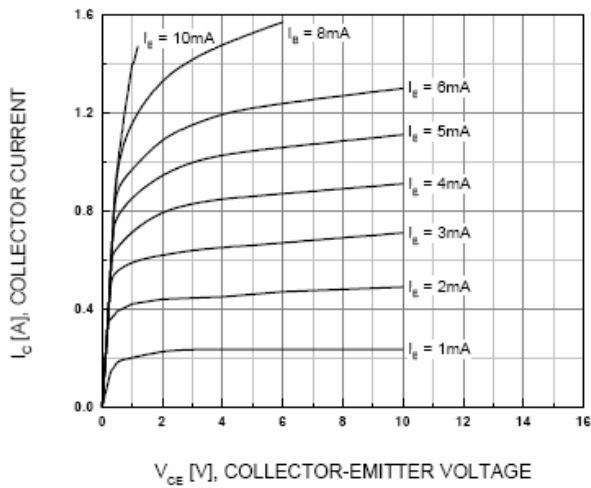


Figure 1. Static Characteristics

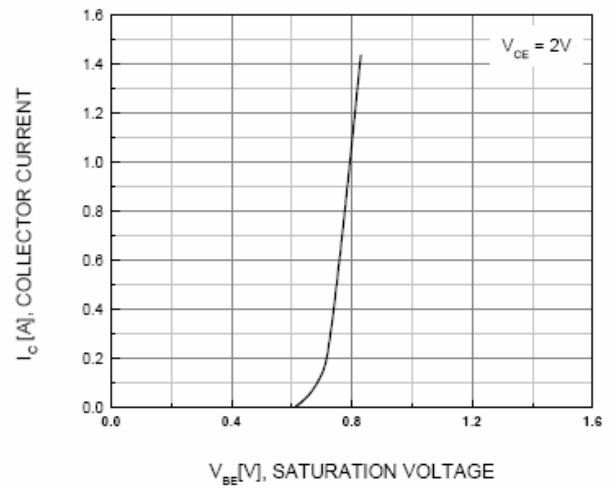


Figure 2. Base-Emitter On Voltage

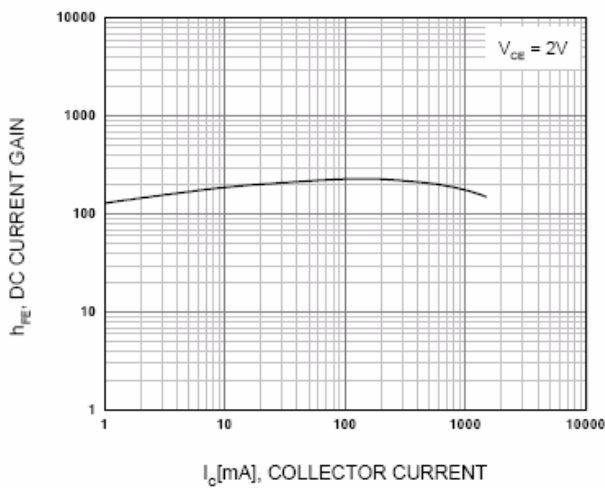


Figure 3. DC Current Gain

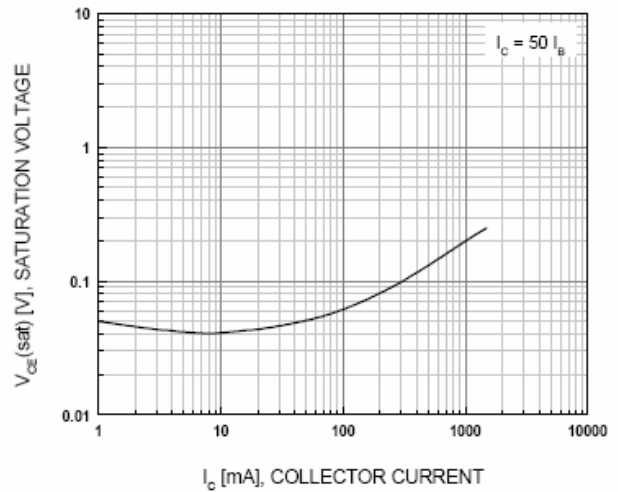


Figure 4. Collector-Emitter Saturation Voltage

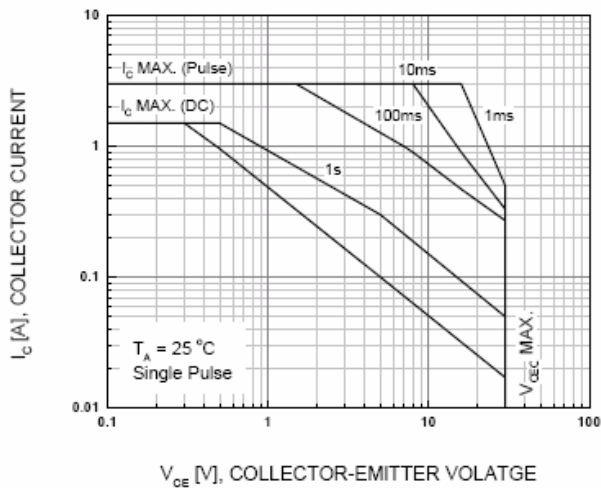


Figure 5. Safe Operating Area

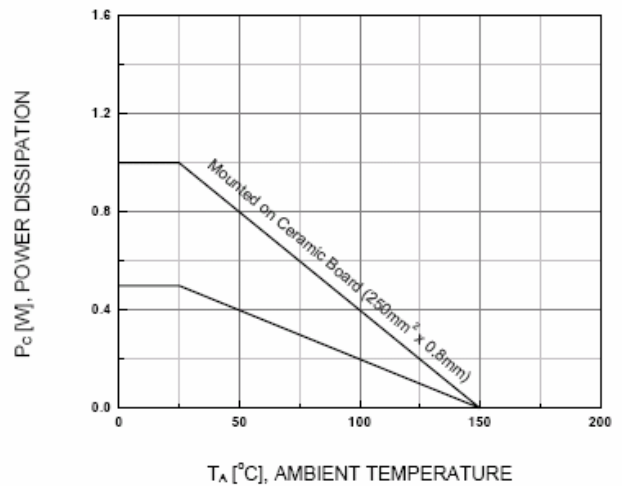


Figure 6. Power Derating

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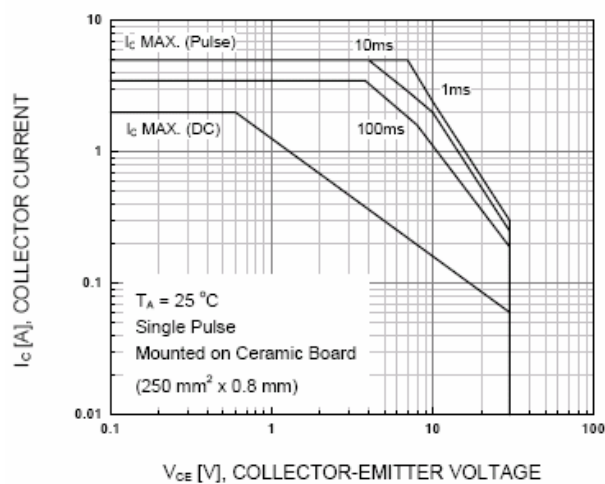


Figure 7. Safe Operating Area

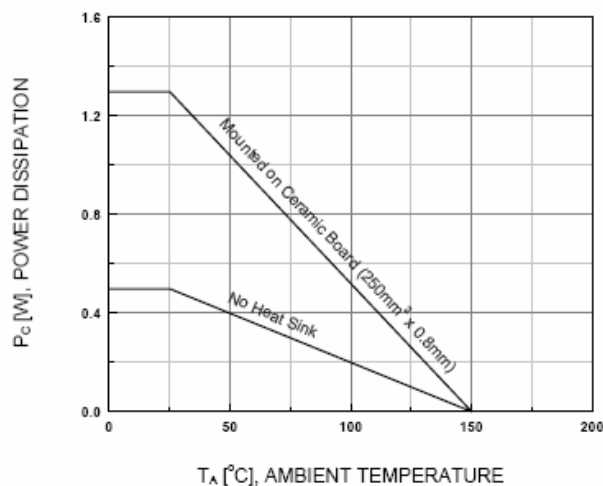


Figure 8. Power Derating



TM

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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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