



Micro Commercial Components



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* ( $I_C=10\text{mA}$ , $I_B=0$ )	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	uAdc
$I_{EBO}$	Emitter-Base Cutoff Current ( $V_{EB}=5.0\text{Vdc}$ , $I_C=0$ )	---	---	0.1	uAdc

### ON CHARACTERISTICS

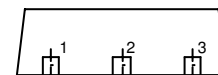
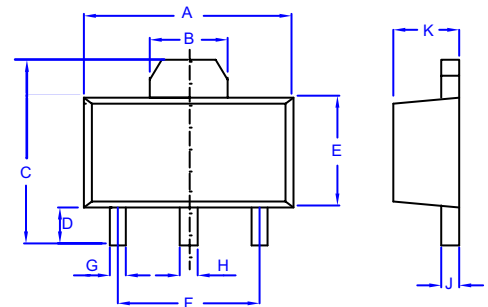
$h_{FE}$	Forward Current Transfer ratio ( $I_C=0.5\text{Adc}$ , $V_{CE}=2.0\text{Vdc}$ )	100	---	320	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=1.5\text{Adc}$ , $I_B=30\text{mA}$ )	---	---	2.0	Vdc
$V_{BE}$	Base-Emitter Voltage ( $I_C=0.5\text{Adc}$ , $V_{CE}=2.0\text{Vdc}$ )	---	---	1.0	Vdc
$f_T$	Transition Frequency ( $I_C=0.5\text{Adc}$ , $V_{CE}=2.0\text{Vdc}$ )	---	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

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	

## 2SC2883

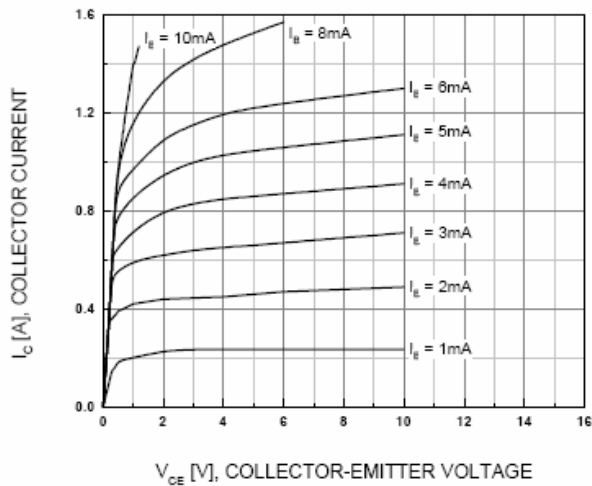


Figure 1. Static Characteristics

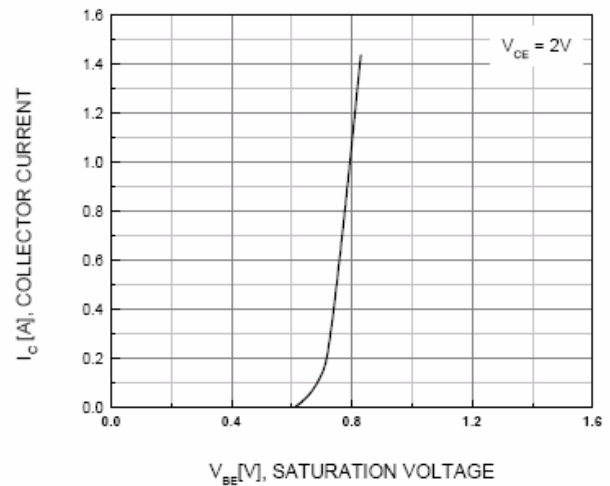


Figure 2. Base-Emitter On Voltage

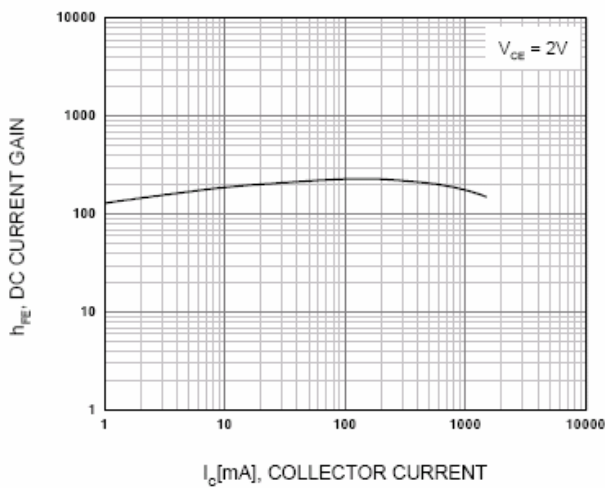


Figure 3. DC Current Gain

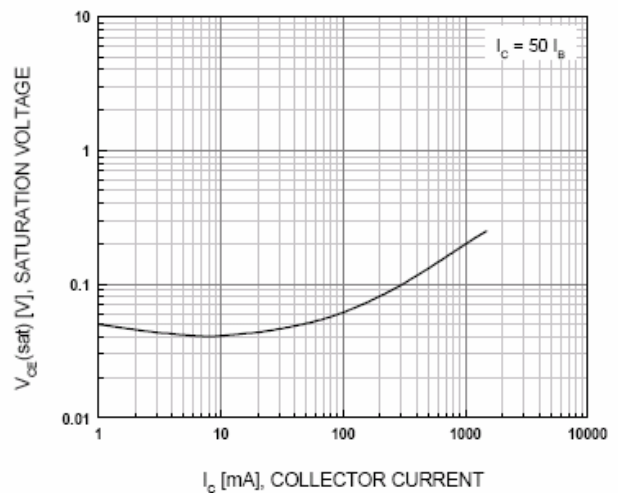


Figure 4. Collector-Emitter Saturation Voltage

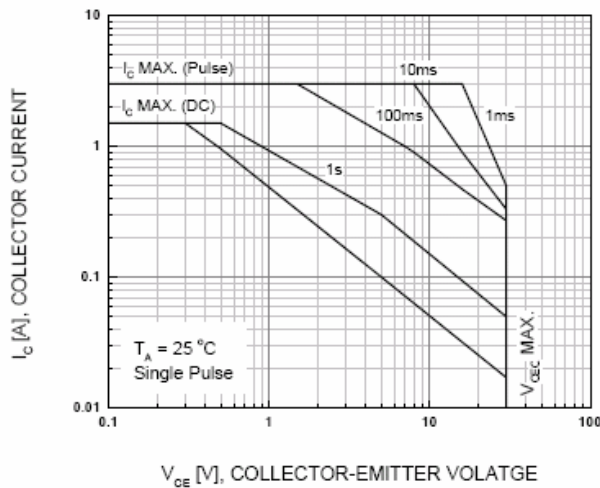


Figure 5. Safe Operating Area

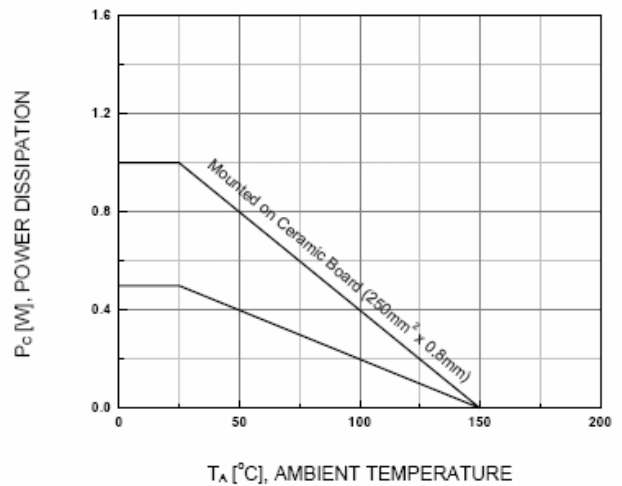


Figure 6. Power Derating

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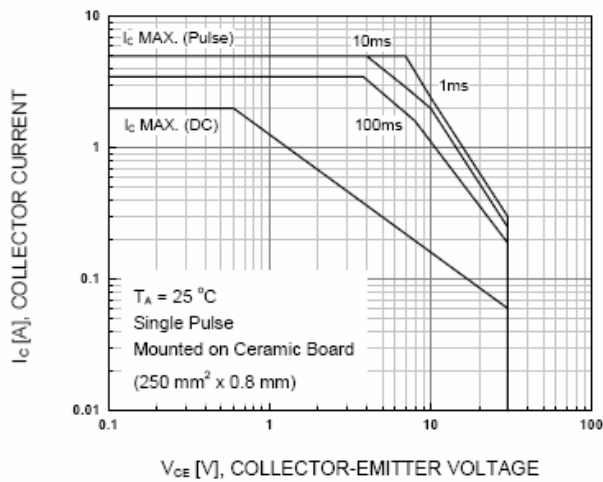


Figure 7. Safe Operating Area

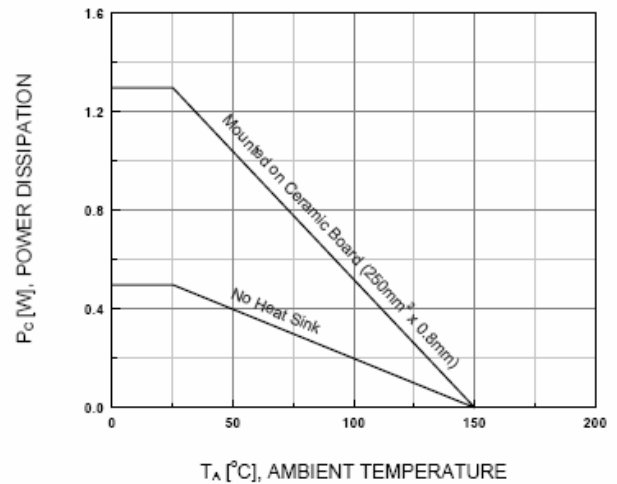


Figure 8. Power Derating



TM

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## Ordering Information :

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

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

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