



Micro Commercial Components



Micro Commercial Components  
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**2SC2883-O**

**2SC2883-Y**

## Features

- 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 <sub>CEO</sub>	Collector-Emitter Voltage	30	V
V <sub>CBO</sub>	Collector-Base Voltage	30	V
V <sub>EBO</sub>	Emitter-Base Voltage	5.0	V
I <sub>C</sub>	Collector Current	1500	mA
P <sub>C</sub>	Collector power dissipation	500	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	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 <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage* (I <sub>C</sub> =10mA, I <sub>B</sub> =0)	30	---	---	Vdc
V <sub>(BR)EBO</sub>	Collector-Emitter Breakdown Voltage* (I <sub>E</sub> =1mA, I <sub>C</sub> =0)	5	---	---	Vdc
I <sub>CBO</sub>	Collector-Base Cutoff Current (V <sub>CB</sub> =30Vdc, I <sub>E</sub> =0)	---	---	0.1	uAdc
I <sub>EBO</sub>	Emitter-Base Cutoff Current (V <sub>EB</sub> =5.0Vdc, I <sub>C</sub> =0)	---	---	0.1	uAdc

### ON CHARACTERISTICS

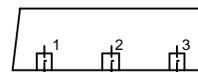
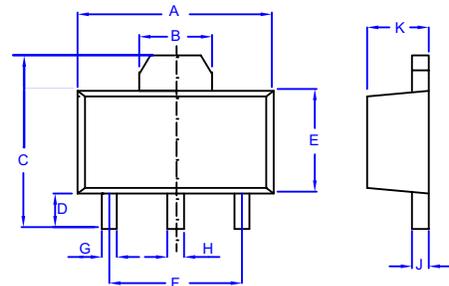
h <sub>FE</sub>	Forward Current Transfer ratio (I <sub>C</sub> =0.5Adc, V <sub>CE</sub> =2.0Vdc)	100	---	320	---
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage (I <sub>C</sub> =1.5Adc, I <sub>B</sub> =30mA)	---	---	2.0	Vdc
V <sub>BE</sub>	Base-Emitter Voltage (I <sub>C</sub> =0.5Adc, V <sub>CE</sub> =2.0Vdc)	---	---	1.0	Vdc
f <sub>T</sub>	Transition Frequency (I <sub>C</sub> =0.5Adc, V <sub>CE</sub> =2.0Vdc)	---	120	---	MHz
C <sub>ob</sub>	Collector Output Capacitance (V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz)	---	---	40	pF

### CLASSIFICATION OF H<sub>FE</sub>

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

## NPN Silicon Power Transistors

### SOT-89



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

DIM	DIMENSINS				NOTES
	INCHES		MM		
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

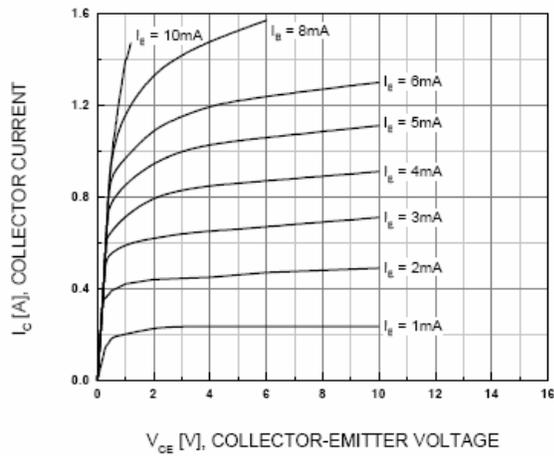


Figure 1. Static Characteristics

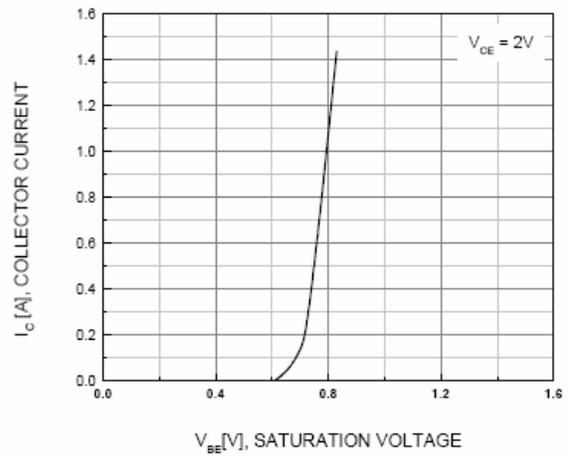


Figure 2. Base-Emitter On Voltage

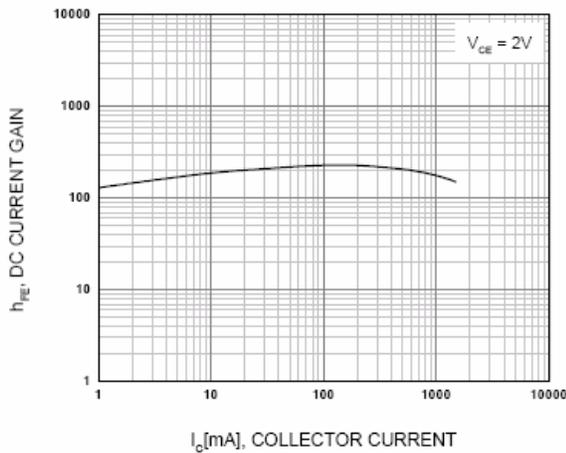


Figure 3. DC Current Gain

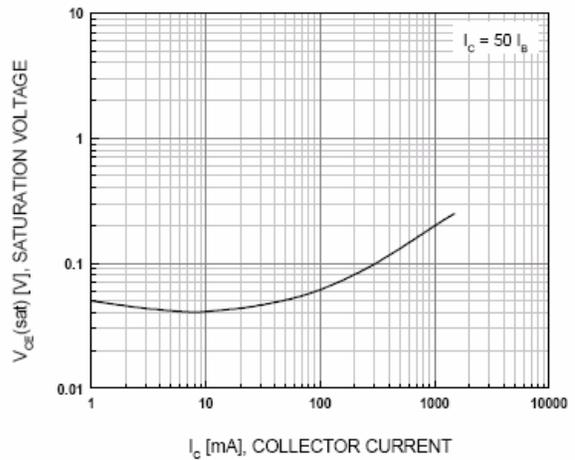


Figure 4. Collector-Emitter Saturation Voltage

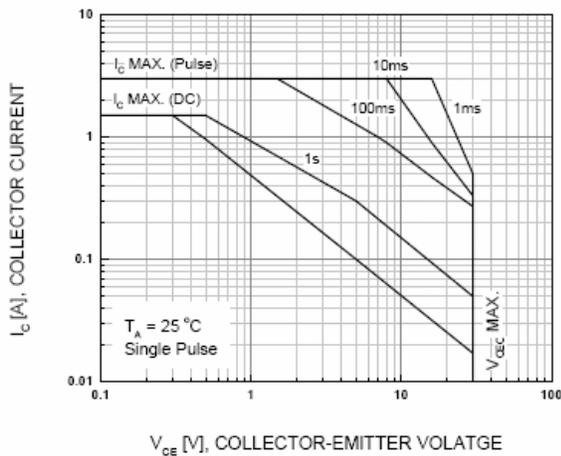


Figure 5. Safe Operating Area

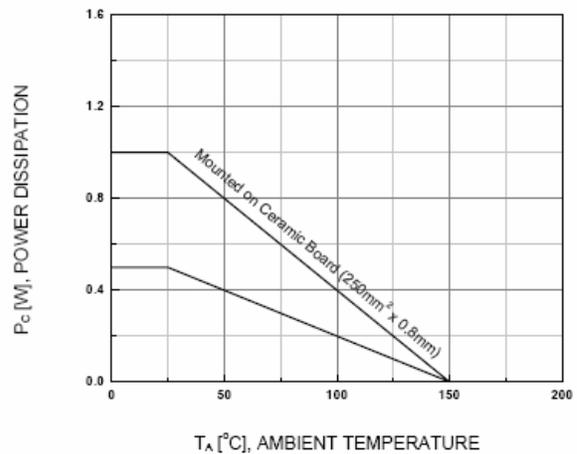


Figure 6. Power Derating

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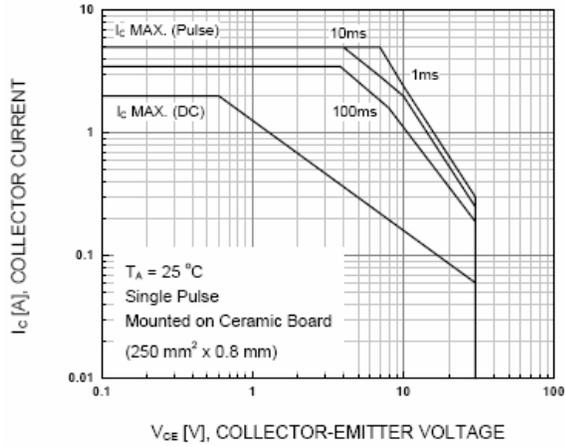


Figure 7. Safe Operating Area

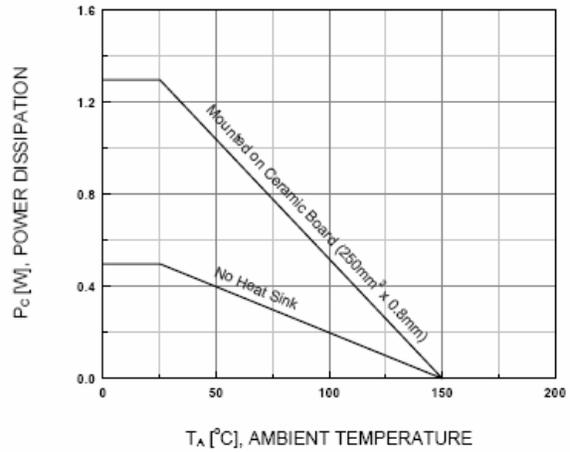


Figure 8. Power Derating



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### Ordering Information :

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

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