

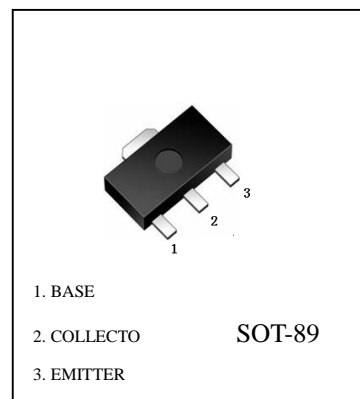
**FEATURES**

- Low voltage

**2SC2883 (NPN)**

Maximum Ratings (Ta=25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V <sub>CBO</sub>	30	V
Collector-Emitter Voltage	V <sub>CEO</sub>	30	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current -Continuous	I <sub>C</sub>	1.5	A
Collector Power dissipation	P <sub>C</sub>	0.5	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55to +150	°C



ELECTRICAL CHARACTERISTICS ( @ Ta=25 °C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>CBO</sub>	I <sub>C</sub> =1mA, I <sub>E</sub> =0	30			V
Collector-emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0	30			V
Emitter-base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> =1mA, I <sub>C</sub> =0	5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =30V, I <sub>E</sub> =0			0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			0.1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =0.5A	100		320	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =1.5A, I <sub>B</sub> =30mA			2	V
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =0.5A			1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =500mA		120		MHz
Collector output capacitance	C <sub>ob</sub>	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



2SC2883 Typical Characteristics

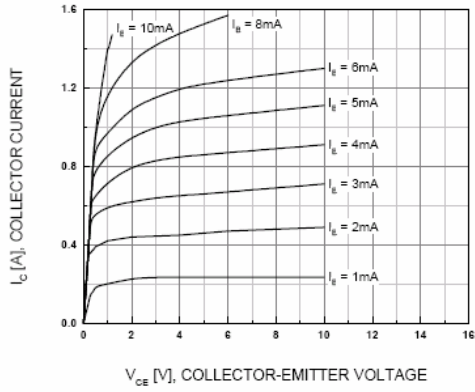


Figure 1. Static Characteristics

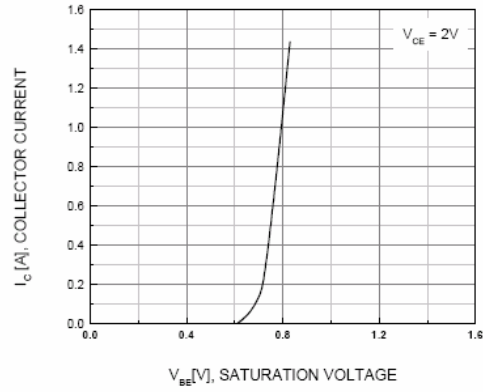


Figure 2. Base-Emitter On Voltage

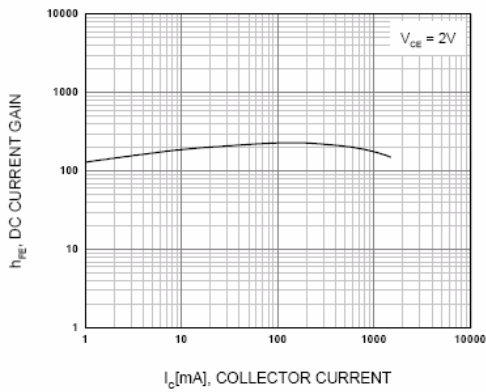


Figure 3. DC Current Gain

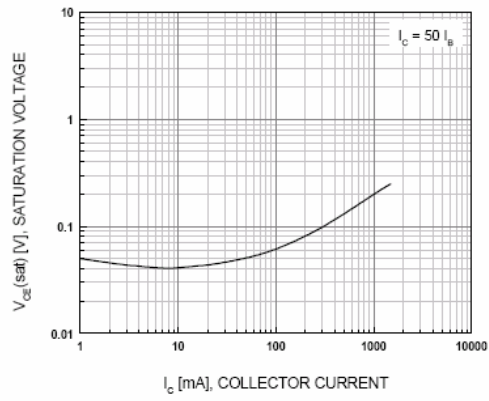


Figure 4. Collector-Emitter Saturation Voltage

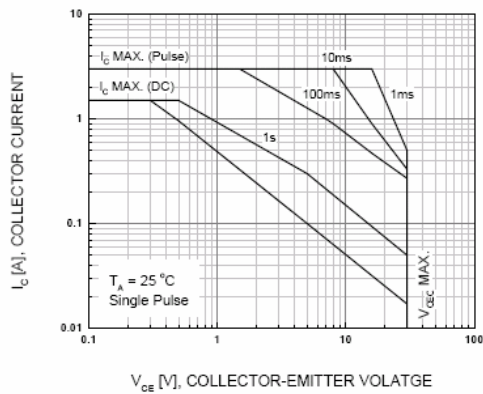


Figure 5. Safe Operating Area

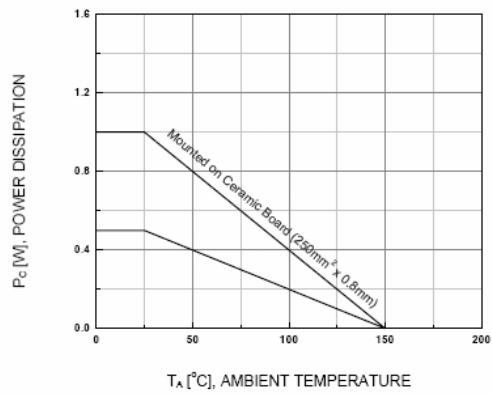


Figure 6. Power Derating