Elektronische Bauelemente

2SC2883

1.5 A , 30 V

NPN Plastic-Encapsulate Transistor

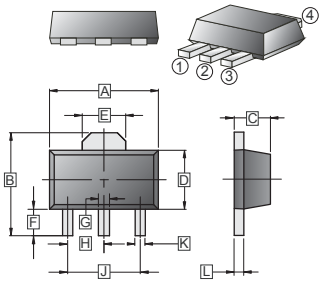
RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low Voltage.

SOT-89



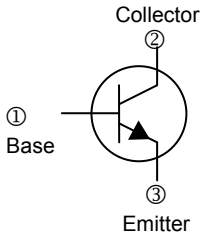
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.60	G	0.40	0.58
B	3.94	4.25	H	1.50	TYP
C	1.40	1.60	J	3.00	TYP
D	2.30	2.60	K	0.32	0.52
E	1.50	1.70	L	0.35	0.44
F	0.89	1.20			

CLASSIFICATION OF h_{FE}

Product-Rank	2SC2883-O	2SC2883-Y
Range	100~200	160~320
Marking	GO	GY

PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-89	1K	7' inch



ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	30	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5	V
Continuous Collector Current	I_C	1.5	A
Collector Power Dissipation	P_C	500	mW
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test condition
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	30	-	-	V	I_C=1mA, I_E=0
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	30	-	-	V	I_C=10mA, I_B=0
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	I_E=1mA, I_C=0
Collector Cut-Off Current	I_{CBO}	-	-	0.1	μA	V_{CB}=30V, I_E=0
Emitter Cut-Off Current	I_{EBO}	-	-	0.1	μA	V_{EB}=5V, I_C=0
DC Current Gain	h_{FE}	100	-	320		V_{CE}=2V, I_C=500mA
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	2	V	I_C=1.5A, I_B=30mA
Base to emitter Voltage	V_{BE}	-	-	1	V	V_{CE}=2V, I_C=500mA
Transition Frequency	f_T	-	120	-	MHz	V_{CE}=2V, I_C = 500mA
Collector Output Capacitance	C_{ob}	-	-	40	pF	V_{CB}=10V, I_E=0, f=1MHz

CHARACTERISTIC CURVE

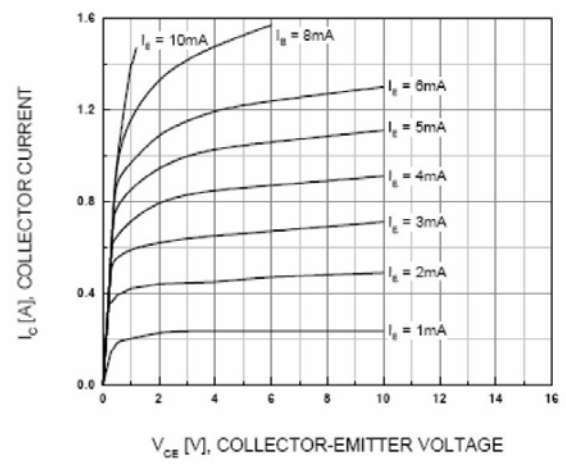


Figure 1. Static Characteristics

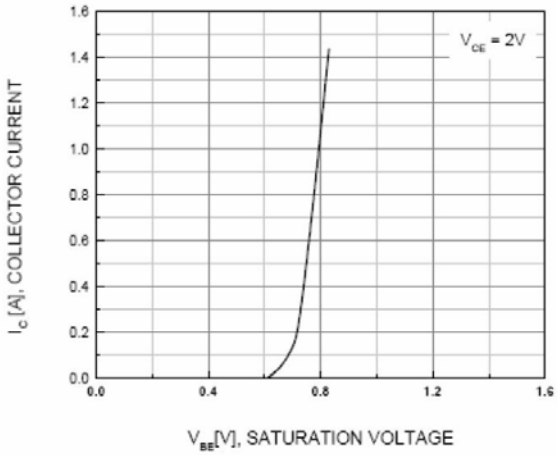


Figure 2. Base-Emitter On Voltage

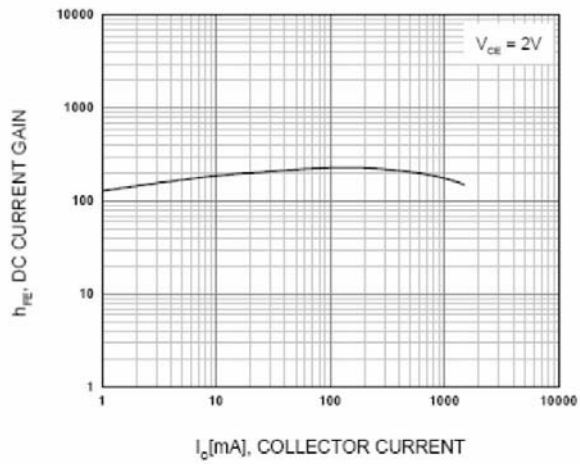


Figure 3. DC Current Gain

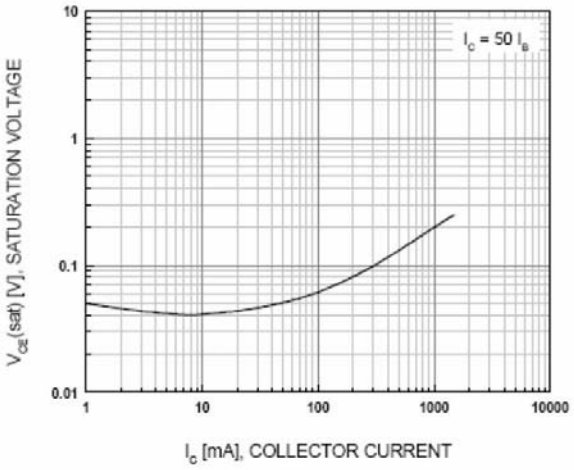


Figure 4. Collector-Emitter Saturation Voltage

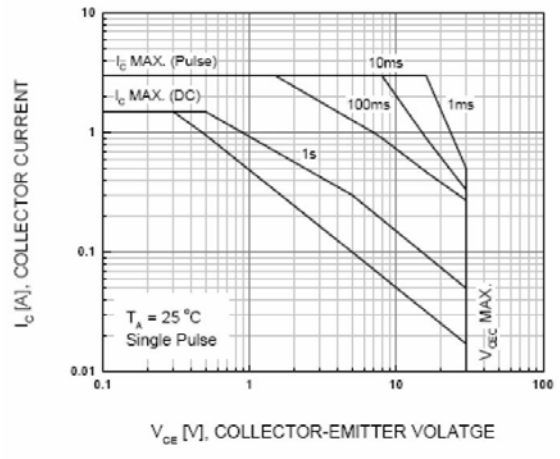


Figure 5. Safe Operating Area

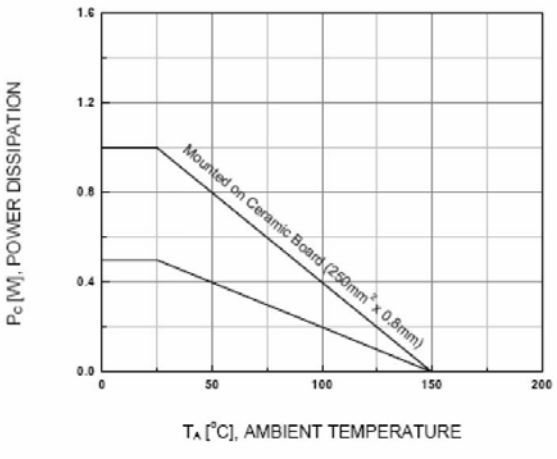


Figure 6. Power Derating

CHARACTERISTIC CURVE

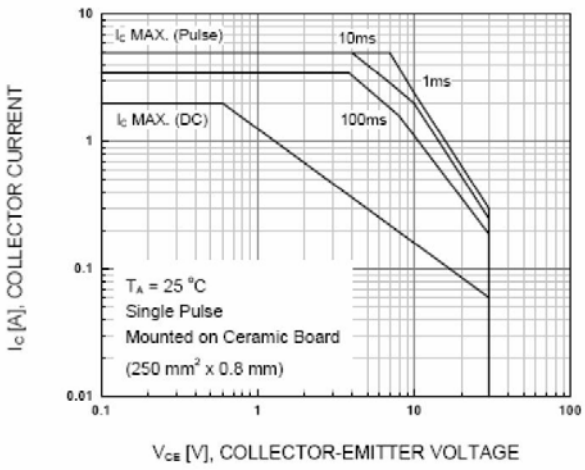


Figure 7. Safe Operating Area

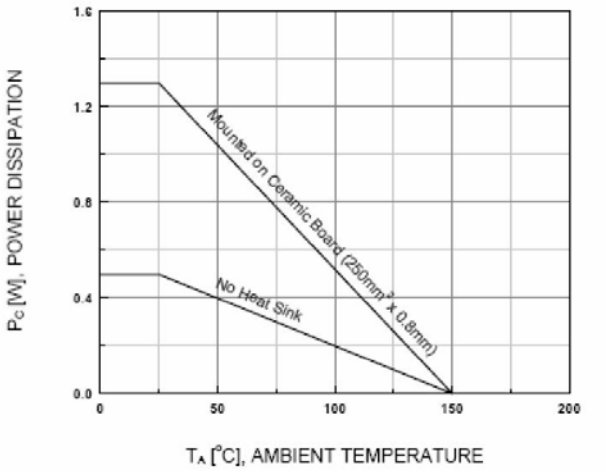


Figure 8. Power Derating