

# 2SC2383

# ${1 A\,,\,160 V} \\ NPN \ Plastic \ Encapsulated \ Transistor$

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

#### **FEATURES**

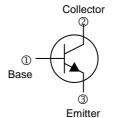
- Small Flat Package
- General Purpose Application

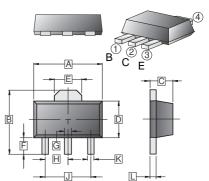
## **CLASSIFICATION OF h**<sub>FE</sub>

Product-Rank	2SC2383-O	2SC2383-Y		
Range	100~200	160~320		

#### **PACKAGE INFORMATION**

Package	MPQ	Leader Size		
SOT-89	1K	7 inch		





**SOT-89** 

REF.	Millimeter			Millimeter		
	Min.	Max.	REF.	Min.	Max.	
Α	4.40	4.60	G	0.40	0.58	
В	3.94	4.25	Ι	1.50 TYP		
С	1.40	1.60	7	3.00 TYP		
D	2.25	2.60	K	0.32	0.52	
Е	1.50	1.85	Ĺ	0.35	0.44	
F	0.89	1.20				

## **ABSOLUTE MAXIMUM RATINGS** (T<sub>A</sub>=25℃ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V <sub>CBO</sub>	160	V
Collector-Emitter Voltage	V <sub>CEO</sub>	160	V
Emitter-Base Voltage	V <sub>EBO</sub>	6	V
Collector Current-Continuous	I <sub>C</sub>	1	A
Collector Power Dissipation	Pc	0.5	mW
Junction & Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	150, -55~150	°C

## $\textbf{ELECTRICAL CHARACTERISTICS} \; (T_A = 25 \, \texttt{C} \; \text{unless otherwise specified})$

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	160	-	-	V	$I_C=0.1$ mA, $I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	160	-	-	V	I <sub>C</sub> =10mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	6	-	-	V	I <sub>E</sub> =10μA, I <sub>C</sub> =0
Collector Cut-Off Current	I <sub>CBO</sub>	-	-	1	μΑ	V <sub>CB</sub> =150V, I <sub>E</sub> =0
Emitter Cut-Off Current	I <sub>EBO</sub>	-	-	1	μΑ	V <sub>EB</sub> =6V, I <sub>C</sub> =0
DC Current Gain	h <sub>FE</sub>	100	-	320		V <sub>CE</sub> =5V, I <sub>C</sub> =200mA
Collector-Emitter Saturation voltage	$V_{\text{CE(sat)}}$	-	-	1	V	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA
Base-Emitter voltage	$V_{BE}$	0.45	-	0.75	V	I <sub>C</sub> =5mA, V <sub>CE</sub> =5V
Transition Frequency	f⊤	20	-	-	MHz	V <sub>CE</sub> =5V,I <sub>C</sub> =200mA
Collector Output Capacitance	Сов	-	-	20	pF	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz

http://www.SeCoSGmbH.com/

Any changes of specification will not be informed individually.

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