

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

## FEATURES

- High Voltage:  $V_{CE0}=160V$
- Large Continuous Collector Current Capability

## MARKING

2383

## CLASSIFICATION OF $h_{FE}$

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

## PACKAGE INFORMATION

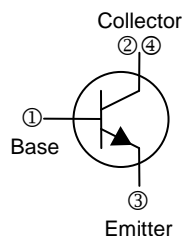
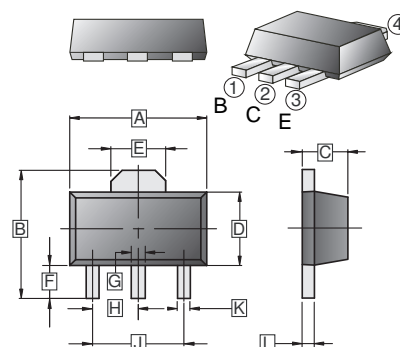
Package	MPQ	Leader Size
SOT-89	1K	7 inch

## ORDER INFORMATION

Part Number	Type
2SC2383-□	Lead (Pb)-free
2SC2383-□-C	Lead (Pb)-free and Halogen-free

\*□=Rank

### 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	2.25	2.60	K	0.32	0.52
E	1.55 TYP.		L	0.35	0.44
F	0.89	1.20			

## ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	$V_{CBO}$	160	V
Collector-Emitter Voltage	$V_{CEO}$	160	V
Emitter-Base Voltage	$V_{EBO}$	6	V
Collector Current-Continuous	$I_C$	1	A
Collector Power Dissipation	$P_C$	0.5	W
Junction & Storage Temperature	$T_J, T_{STG}$	150, -55~150	$^\circ C$

## ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	160	-	-	V	$I_C=100\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	160	-	-	V	$I_C=10mA, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	6	-	-	V	$I_E=10\mu A, I_C=0$
Collector Cut-off Current	$I_{CBO}$	-	-	1	$\mu A$	$V_{CB}=150V, I_E=0$
Emitter Cut-off Current	$I_{EBO}$	-	-	1	$\mu A$	$V_{EB}=6V, I_C=0$
DC Current Gain	$h_{FE}$	100	-	320		$V_{CE}=5V, I_C=200mA$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	1	V	$I_C=500mA, I_B=50mA$
Base-Emitter Voltage	$V_{BE}$	0.45	-	0.75	V	$I_C=5mA, V_{CE}=5V$
Transition Frequency	$f_T$	20	-	-	MHz	$V_{CE}=5V, I_C=200mA$
Collector Output Capacitance	$C_{ob}$	-	-	20	pF	$V_{CB}=10V, I_E=0, f=1MHz$

**CHARACTERISTIC CURVES**

**Static Characteristic**

