

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

## FEATURES

- Small Flat Package
- General Purpose Application

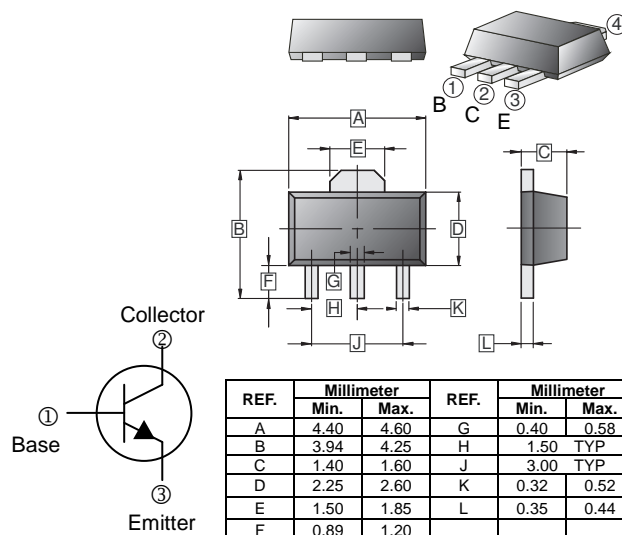
## CLASSIFICATION OF $h_{FE}$

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

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-89	1K	7 inch

### SOT-89



## ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ 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	mW
Junction & Storage Temperature	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	160	-	-	V	$I_C=0.1\text{mA}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	160	-	-	V	$I_C=10\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	6	-	-	V	$I_E=10\mu\text{A}, I_C=0$
Collector Cut-Off Current	$I_{CBO}$	-	-	1	$\mu\text{A}$	$V_{CB}=150\text{V}, I_E=0$
Emitter Cut-Off Current	$I_{EBO}$	-	-	1	$\mu\text{A}$	$V_{EB}=6\text{V}, I_C=0$
DC Current Gain	$h_{FE}$	100	-	320		$V_{CE}=5\text{V}, I_C=200\text{mA}$
Collector-Emitter Saturation voltage	$V_{CE(sat)}$	-	-	1	V	$I_C=500\text{mA}, I_B=50\text{mA}$
Base-Emitter voltage	$V_{BE}$	0.45	-	0.75	V	$I_C=5\text{mA}, V_{CE}=5\text{V}$
Transition Frequency	$f_T$	20	-	-	MHz	$V_{CE}=5\text{V}, I_C=200\text{mA}$
Collector Output Capacitance	$C_{OB}$	-	-	20	pF	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$