

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

FEATURES

- Small Flat Package
- General Purpose Application

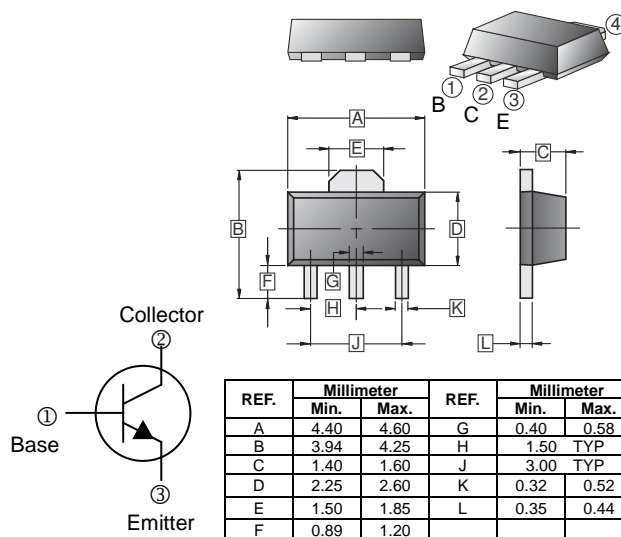
CLASSIFICATION OF h_{FE}

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	μA	$V_{CB}=150\text{V}, I_E=0$
Emitter Cut-Off Current	I_{EBO}	-	-	1	μA	$V_{EB}=6\text{V}, I_C=0$
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	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$