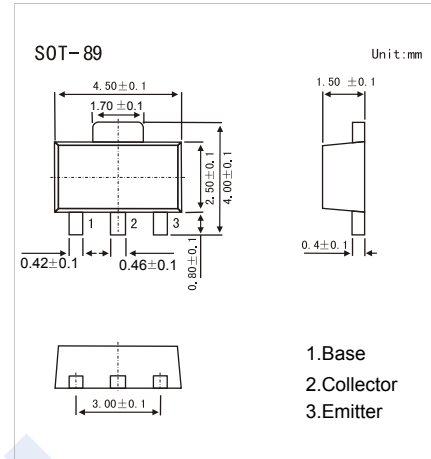


## NPN Transistors

### 2SC2383-HF

#### ■ Features

- High voltage:  $V_{CE0}=160V$
- Large continuous collector current capability
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



#### ■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	160	V
Collector - Emitter Voltage	$V_{CE0}$	160	
Emitter - Base Voltage	$V_{EB0}$	6	
Collector Current - Continuous	$I_C$	1	A
Collector Power Dissipation	$P_C$	0.5	W
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 to 150	

#### ■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_C = 100 \mu A, I_E = 0$	160			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = 10 mA, I_B = 0$	160			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = 100 \mu A, I_C = 0$	6			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = 150 V, I_E = 0$			1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 6 V, I_C = 0$			1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500 mA, I_B = 50 mA$			1	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 500 mA, I_B = 50 mA$			1.2	
Base - emitter voltage	$V_{BE}$	$V_{CE} = 5 V, I_C = 5 mA$	0.45		0.75	
DC current gain	$h_{FE}$	$V_{CE} = 6 V, I_C = 200 mA$	100		320	
Collector output capacitance	$C_{ob}$	$V_{CB} = 10 V, I_E = 0, f = 1 MHz$			20	$\mu F$
Transition frequency	$f_T$	$V_{CE} = 5 V, I_C = 200 mA$	20			MHz

#### ■ Classification of $h_{FE}$

Type	2SC2383-O-HF	2SC2383-Y-HF
Range	100-200	160-320
Marking	2383O <sub>F</sub>	2383Y <sub>F</sub>

# NPN Transistors

## 2SC2383-HF

### Typical Characteristics

