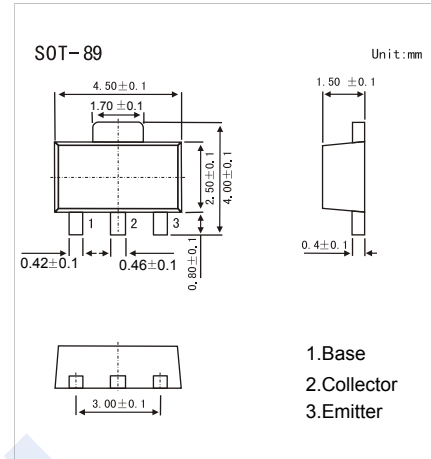


NPN Transistors

2SC2383

■ Features

- High voltage: $V_{CE0}=160V$
- Large continuous collector current capability

■ 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	μA
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	μF
Transition frequency	f_T	$V_{CE} = 5 V, I_C = 200 mA$	20			MHz

■ Classification of h_{FE}

Type	2SC2383-O	2SC2383-Y
Range	100-200	160-320
Marking	2383O	2383Y

NPN Transistors

2SC2383

Typical Characteristics

