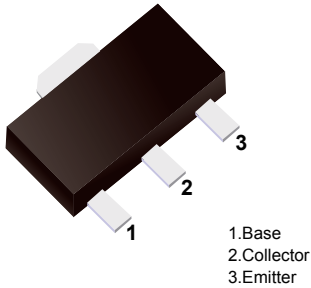


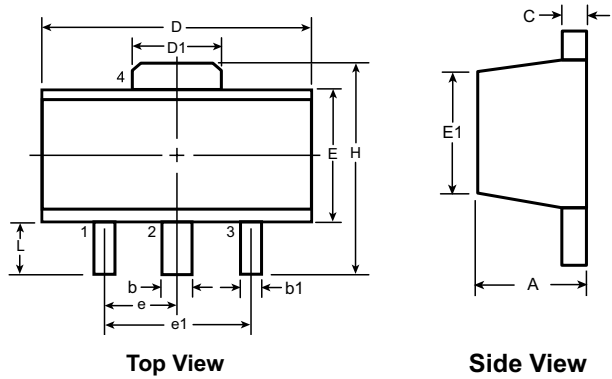
■ Features

- Excellent h_{FE} characteristics



■ Simplified outline(SOT-89)

SOT-89 PACKAGE OUTLINE



Symbol	A	b	b1	C	D	D1	E	E1	e	e1	H	L
Dimensions (mm)	MIN	1.40	0.44	0.36	0.3	4.40	1.50	2.29	2.00 [†]	1.50 BSC	3.94	0.89
	NOM	-	-	-	-	-	-	-	-	3.00 BSC	-	-
	MAX	1.60	0.56	0.48	0.5	4.60	1.75	2.60	2.29	-	4.25	1.20

Dimensions in mm

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	160	V
Collector Emitter Voltage	V_{CEO}	160	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current	I_C	1	A
Base Current	I_B	0.5	A
Collector Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

2SC2383

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 5\text{ V}$, $I_C = 200\text{ mA}$ Current Gain Group O Y	h_{FE} h_{FE}	100 160	- -	200 320	- -
Collector Base Cutoff Current at $V_{CB} = 150\text{ V}$	I_{CBO}	-	-	1	μA
Emitter Base Cutoff Current at $V_{EB} = 6\text{ V}$	I_{EBO}	-	-	1	μA
Collector Emitter Breakdown Voltage at $I_C = 10\text{ mA}$	$V_{(BR)CEO}$	160	-	-	V
Collector Emitter Saturation Voltage at $I_C = 500\text{ mA}$, $I_B = 50\text{ mA}$	$V_{CE(sat)}$	-	-	1.5	V
Base Emitter on Voltage at $I_C = 5\text{ mA}$, $V_{CE} = 5\text{ V}$	$V_{BE(on)}$	0.45	-	0.75	V
Transition Frequency at $V_{CE} = 5\text{ V}$, $I_C = 200\text{ mA}$	f_T	20	100	-	MHz
Collector Output Capacitance at $V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	-	20	pF

RATING AND CHARACTERISTIC CURVES (2SC2383)

