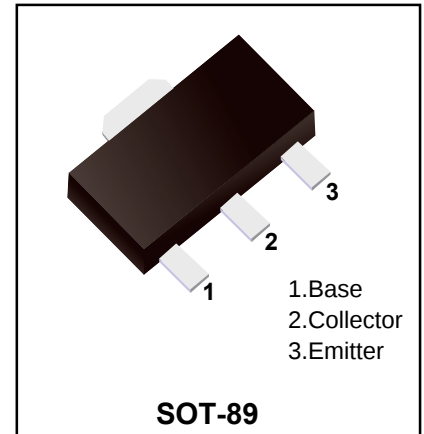


NPN Transistors

Features

- Small Flat Package
- General Purpose Application



Absolute Maximum Rating (Ta=25°C)

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	°C

Electrical Characteristics (Ta=25°C)

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

h_{FE} Classification

Product-Rank	2SC2383-O	2SC2383-Y
Range	100~200	160~320
Marking	2383O	2383Y

Ordering information

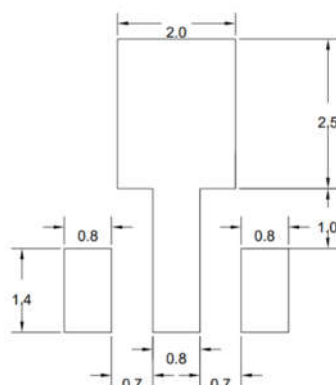
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	3000pcs/Reel	30000PCS/Carton

Package Dimensions

SOT-89

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

The recommended mounting pad size



UNIT:MM

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