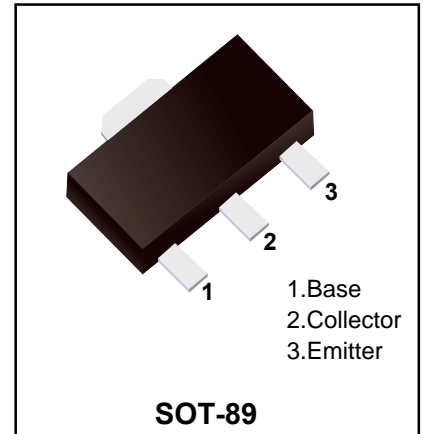


**NPN Transistor**

**Features**

- For Switching and Amplifier Applications.
- As Complementary Type of the PNP Transistor PXT8550 is Recommended.



**Absolute Maximum Rating (Ta=25°C)**

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	40	V
Collector Emitter Voltage	$V_{CEO}$	25	V
Emitter Base Voltage	$V_{EBO}$	6	V
Collector Current	$I_C$	1.5	A
Maximum Power Dissipation	$P_D$	1	W
Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C

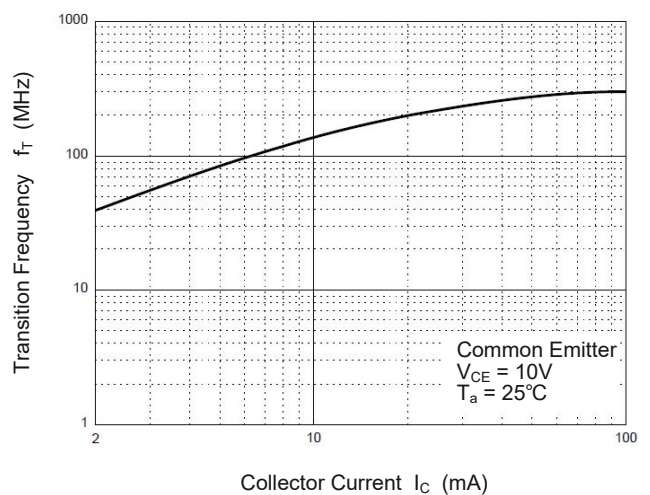
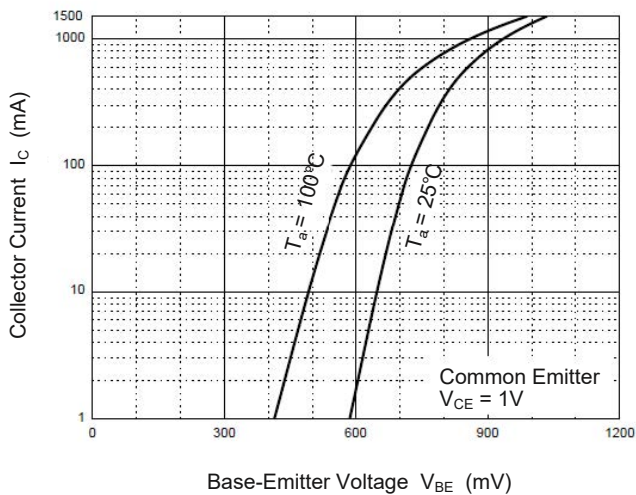
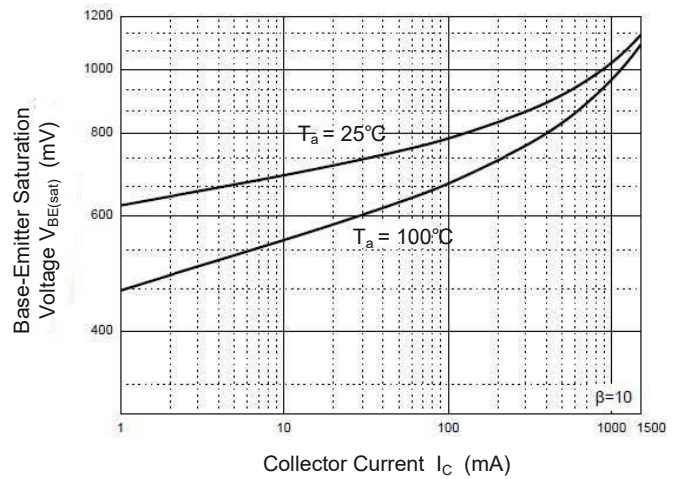
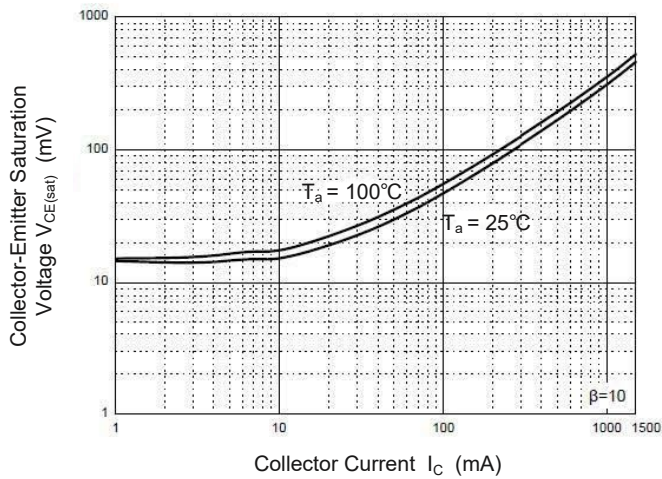
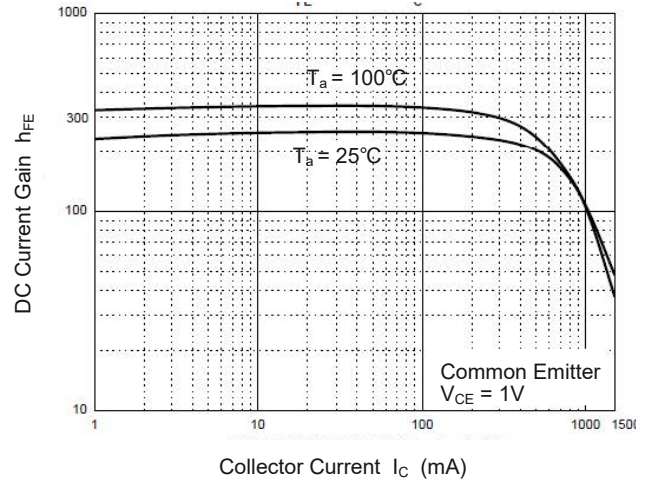
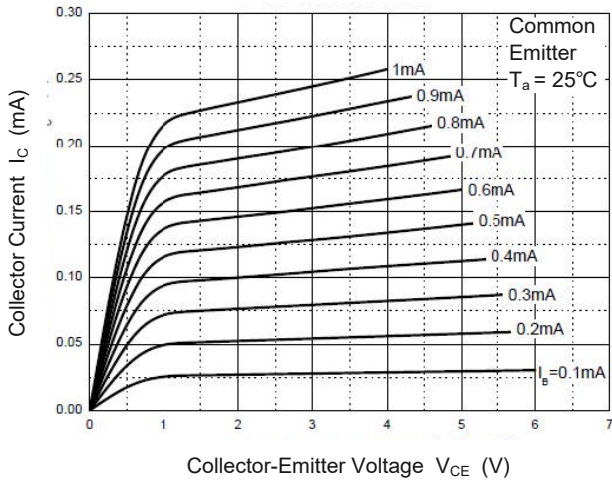
**$h_{FE}$  Classification**

Type	PXT8050
Range	200-350
Marking	Y1

**Electrical Characteristics (Ta=25°C)**

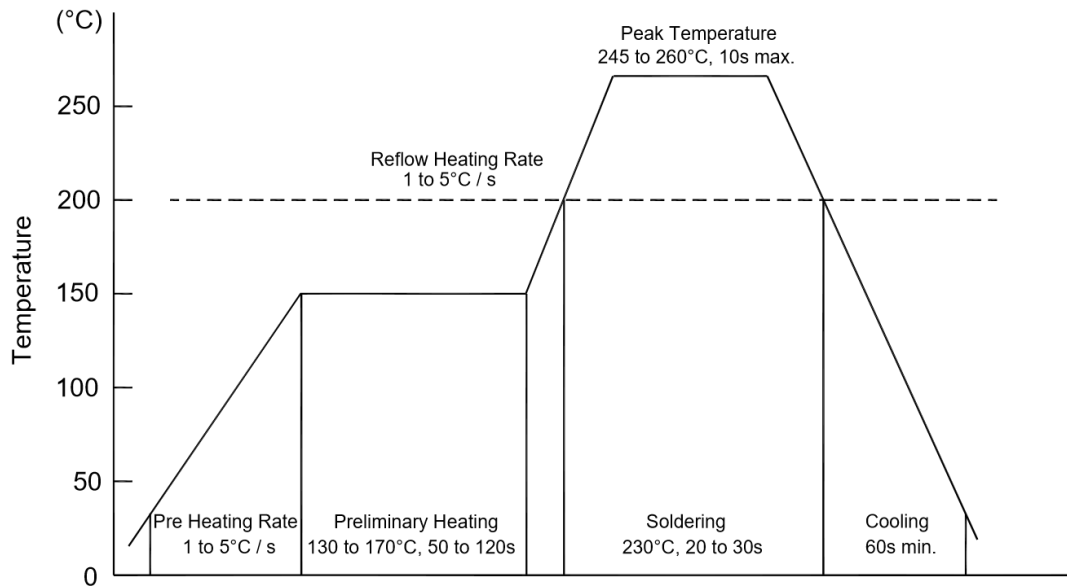
Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 1\text{ V}$ , $I_C = 100\text{ mA}$ Current Gain Group at $V_{CE} = 1\text{ V}$ , $I_C = 800\text{ mA}$	$H_{FE}$	200	--	350	--
Collector Base Cutoff Current at $V_{CB} = 40\text{ V}$	$I_{CBO}$	--	--	100	nA
Collector Base Breakdown Voltage at $I_C = 100\text{ }\mu\text{A}$	$V_{(BR)CBO}$	40	--	--	V
Collector Emitter Breakdown Voltage at $I_C = 0.1\text{ mA}$	$V_{(BR)CEO}$	25	--	--	V
Emitter Base Breakdown Voltage at $I_E = 100\text{ }\mu\text{A}$	$V_{(BR)EBO}$	6	--	--	V
Collector Emitter Saturation Voltage at $I_C = 800\text{ mA}$ , $I_B = 80\text{ mA}$	$V_{CE(sat)}$	--	--	0.5	V
Base Emitter Saturation Voltage at $I_C = 800\text{ mA}$ , $I_B = 80\text{ mA}$	$V_{BE(sat)}$	--	--	1.2	V
Transition Frequency at $V_{CE} = 10\text{ V}$ , $I_C = 50\text{ mA}$ , $f=30\text{MHz}$	$F_T$	100	--	--	MHz

**Typical Characteristics**



## Conditions of Soldering and Storage

### ◆ Recommended condition of reflow soldering



Recommended peak temperature is over 245 °C. If peak temperature is below 245 °C, you may adjust the following parameters:

- Time length of peak temperature (longer)
- Time length of soldering (longer)
- Thickness of solder paste (thicker)

### ◆ Conditions of hand soldering

- Temperature: 370 °C
- Time: 3s max.
- Times: one time

### ◆ Storage conditions

- **Temperature**  
5 to 40 °C
- **Humidity**  
30 to 80% RH
- **Recommended period**  
One year after manufacturing

**Ordering information**

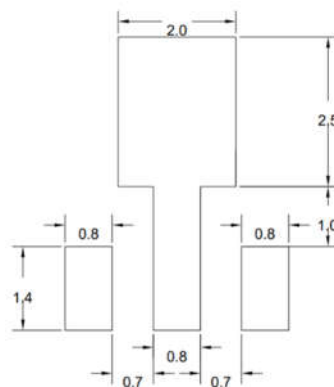
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel,7"reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

**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

## Disclaimer

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