



## SOT-89-3L Plastic-Encapsulate Transistors

### PXT8050 TRANSISTOR (NPN)

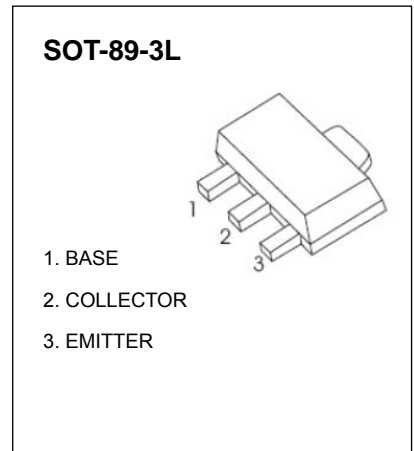
#### FEATURES

- Compliment to PXT8550

#### MARKING: Y1

#### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	40	V
V <sub>CEO</sub>	Collector-Emitter Voltage	25	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current -Continuous	1.5	A
P <sub>C</sub>	Collector Power dissipation	0.5	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~150	°C



#### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100μA, I <sub>E</sub> =0	40			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =0.1mA, I <sub>B</sub> =0	25			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =100μA, I <sub>C</sub> =0	5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =40V, I <sub>E</sub> =0			0.1	μA
Emitter cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> =20V, I <sub>E</sub> =0			0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			0.1	μA
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> =100mA	85		400	
	h <sub>FE(2)</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> =800mA	40			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =800mA, I <sub>B</sub> =80mA			0.5	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =800mA, I <sub>B</sub> =80mA			1.2	V
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> =10mA			1	V
Base-emitter positive favor voltage	V <sub>BEF</sub>	I <sub>B</sub> =1A			1.55	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA, f=30MHz	100			MHz
output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz			15	pF

#### CLASSIFICATION OF h<sub>FE(1)</sub>

Rank	B	C	D	D3
Range	85-160	120-200	160-300	300-400

# Typical Characteristics

# PXT8050

