

PXT8050

NPN GENERAL PURPOSE TRANSISTOR

VOLTAGE 25 Volt **POWER** 300 mWatt

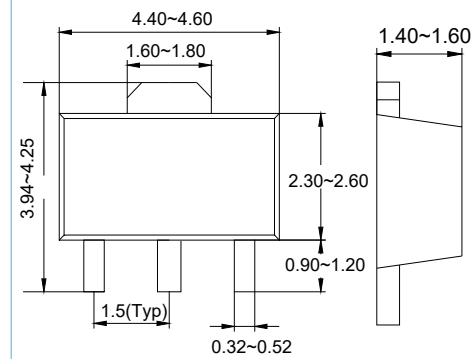
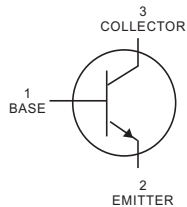
SOT-89 Unit:mm

FEATURES

- NPN epitaxial silicon, planar design
- Epitaxial planar die construction
- Complimentary to PXT8550
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Units
Collector - Emitter Voltage	V_{CE0}	25	V
Collector - Base Voltage	V_{CB0}	40	V
Emitter - Base Voltage	V_{EB0}	5	V
Collector Current - Continuous	I_c	1.5	A
Collector Dissipation	P_c	500	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	250	$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55~+150	$^{\circ}\text{C}$

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ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

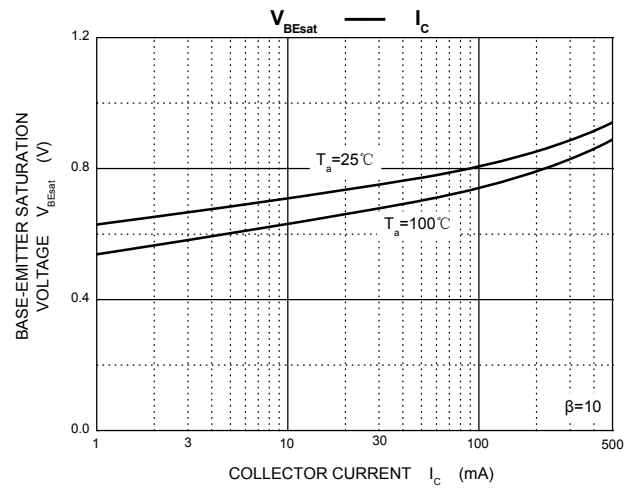
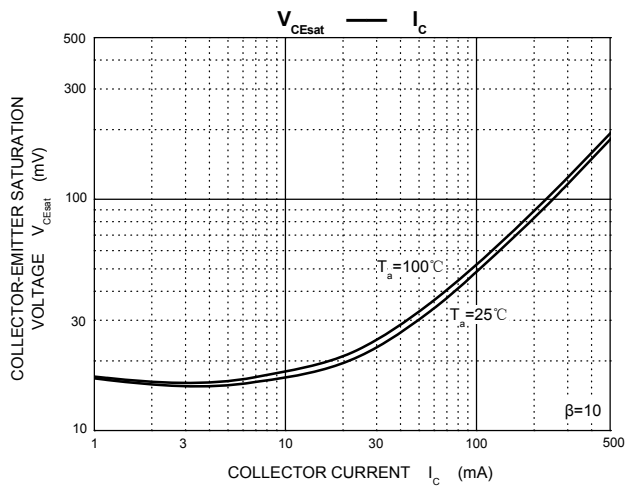
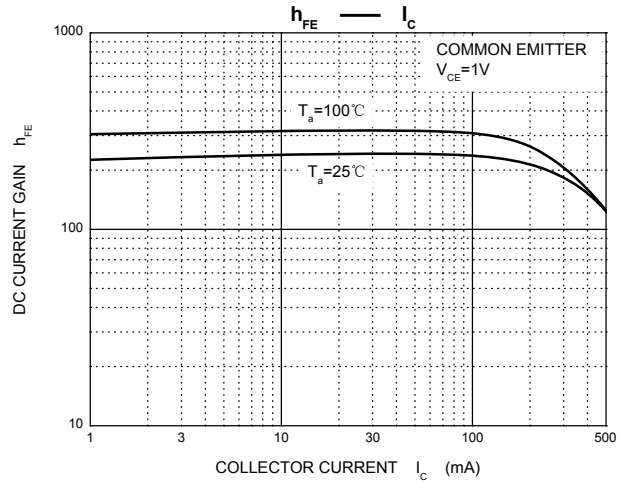
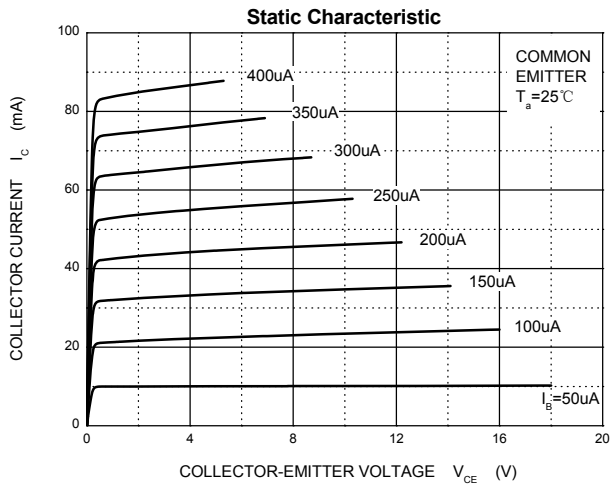
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=40\text{V}, I_E=0$			0.1	μA
Collector cut-off current	I_{CEO}	$V_{CB}=20\text{V}, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=1\text{V}, I_C=100\text{mA}$	85		400	
	$h_{FE(2)}$	$V_{CE}=1\text{V}, I_C=800\text{mA}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=800\text{mA}, I_B=80\text{mA}$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=800\text{mA}, I_B=80\text{mA}$			1.2	V
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=50\text{mA}$ $f=30\text{MHz}$	100			MHz

CLASSIFICATION OF $h_{FE(1)}$

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

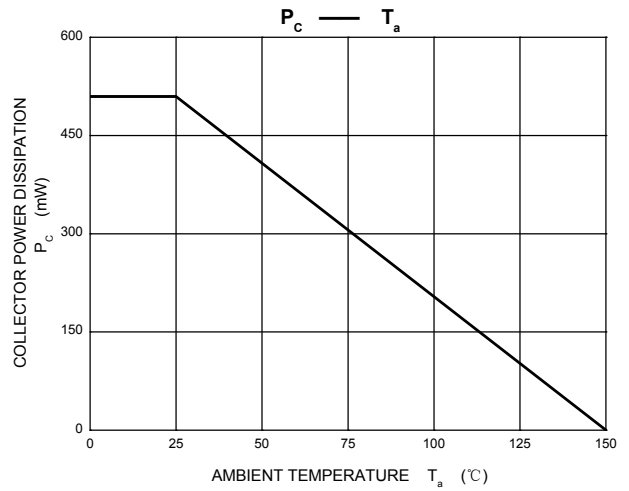
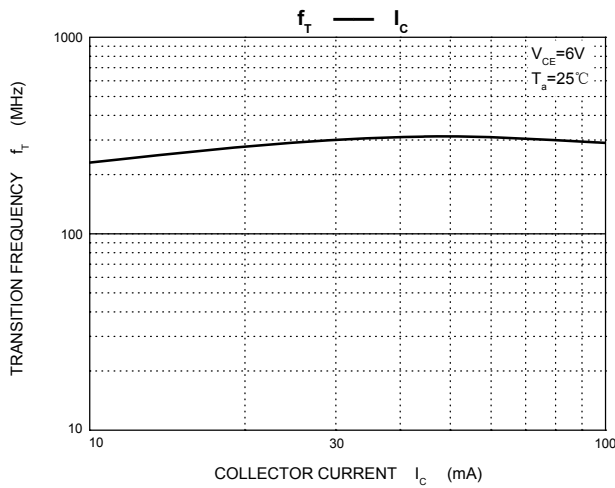
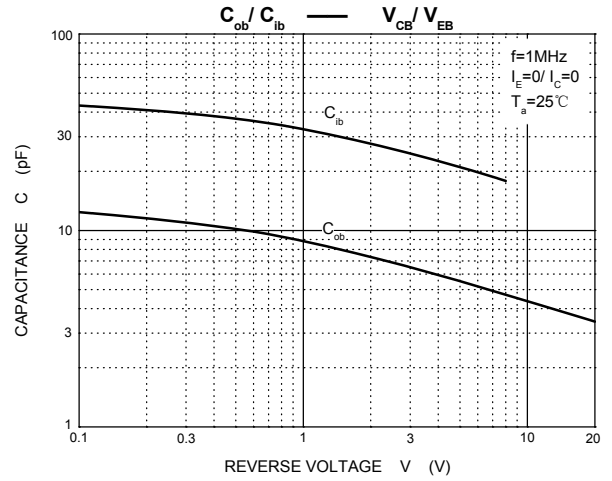
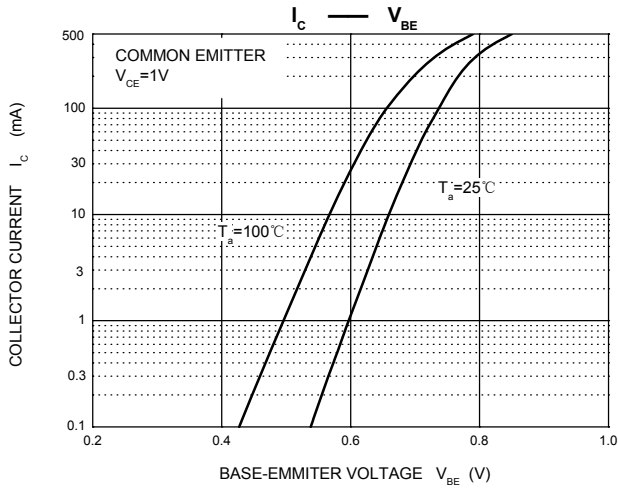
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Typical Characteristics



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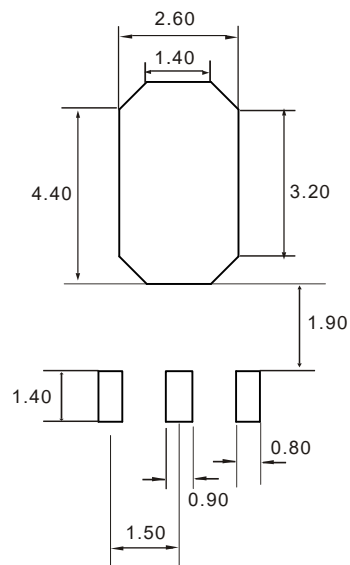


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MOUNTING PAD LAYOUT

SOT-89

Unit:mm



ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
PXT8050	SOT-89	7 Inch	1000