



## PLASTIC-ENCAPSULATE TRANSISTORS

## PXT8050(NPN)

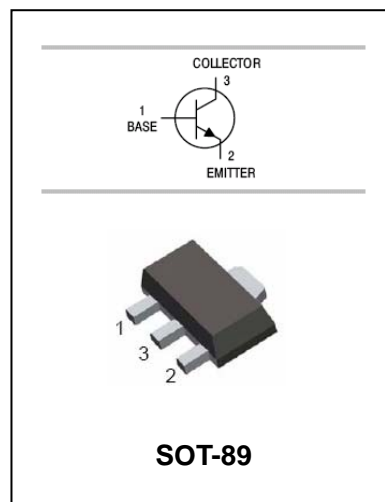
### FEATURES

- Complimentray to PXT8550



### APPLICATIONS

- This device is designed as a general purpose amplifier and switching.



### ORDERING INFORMATION

Type No.	Marking	Package Code
PXT8050	8050	SOT-89

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	40	V
$V_{CEO}$	Collector-Emitter Voltage	25	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current -Continuous	1.5	A
$I_B$	Base Current-Continuous	500	mA
$P_C$	Collector Power dissipation	0.5	W
$T_j$	Junction Temperature	150	°C
$T_{stg}$	Storage Temperature	-55 to +150	°C



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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=0.1mA, I_B=0$	25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5		V
Collector cut-off current	$I_{CBO}$	$V_{CB}=40V, I_E=0$		0.1	$\mu A$
Emitter cut-off current	$I_{CEO}$	$V_{CE}=20V, I_E=0$		0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$		0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=1V, I_C=100mA$ $V_{CE}=1V, I_C=800mA$	85 40	400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=800mA, I_B=80mA$		0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=800mA, I_B=80mA$		1.2	V
Base-emitter voltage	$V_{BE}$	$V_{CE}=1V, I_C=10mA$		1	V
Base-emitter positive forward voltage	$V_{BEF}$	$I_B=1A$		1.55	V
Transition frequency	$f_T$	$V_{CE}=10V, I_C=50mA,$ $f=30MHz$	100		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=10V, f=1MHz, I_E=0$		15	pF

CLASSIFICATION OF  $h_{FE(1)}$

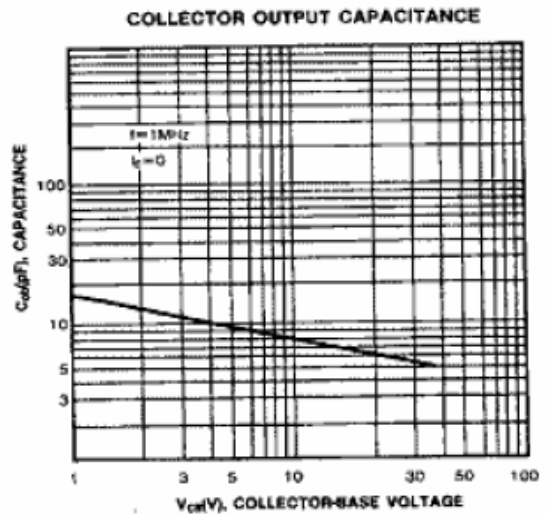
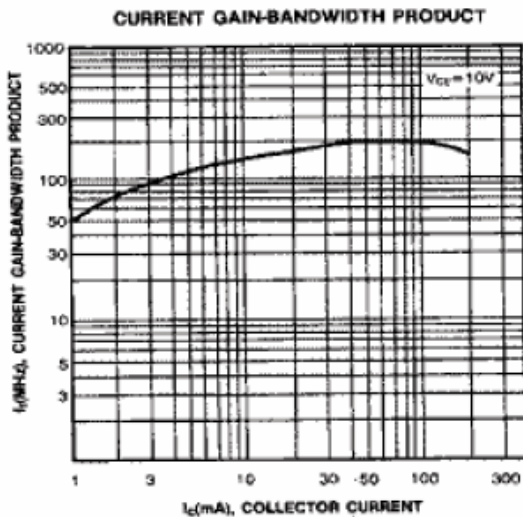
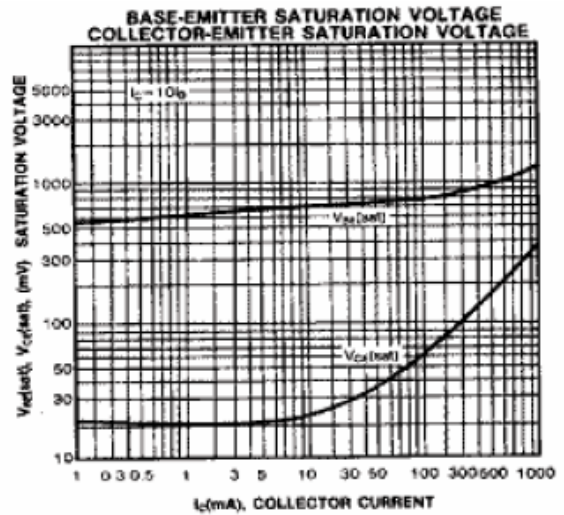
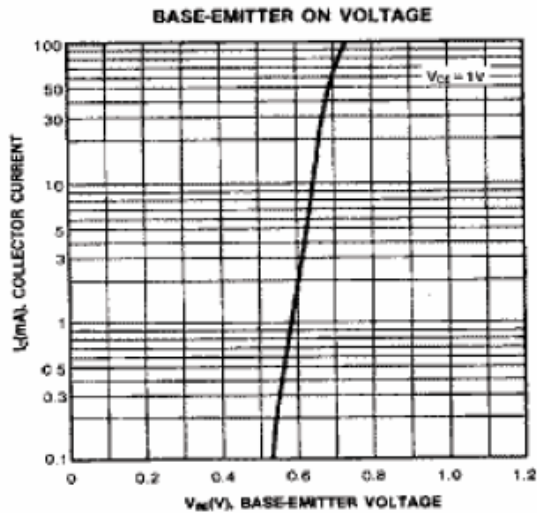
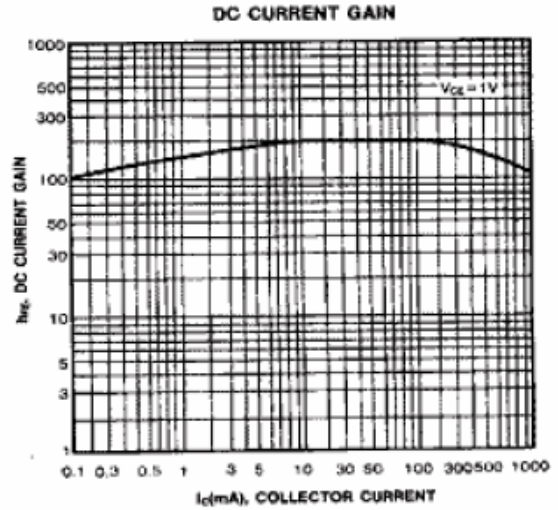
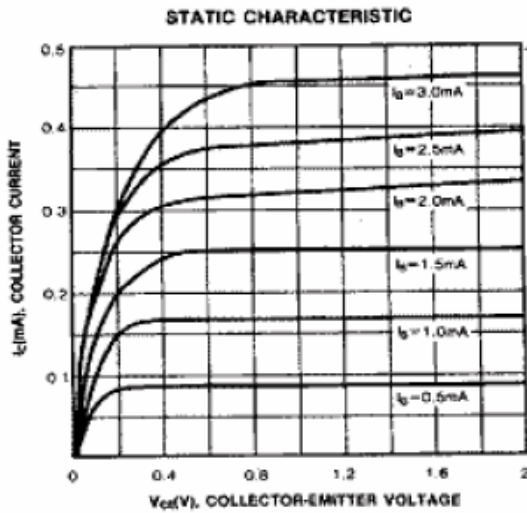
Rank	B	C	D	D3
Range	85-160	120-200	160-300	300-400



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TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified





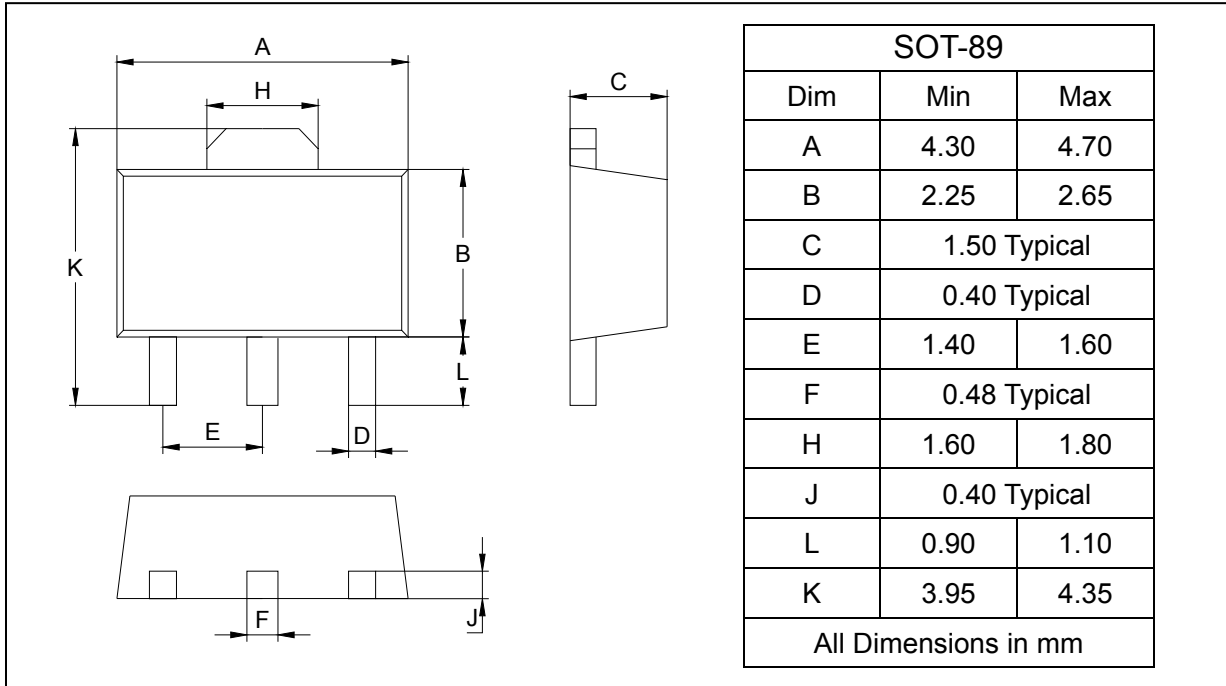
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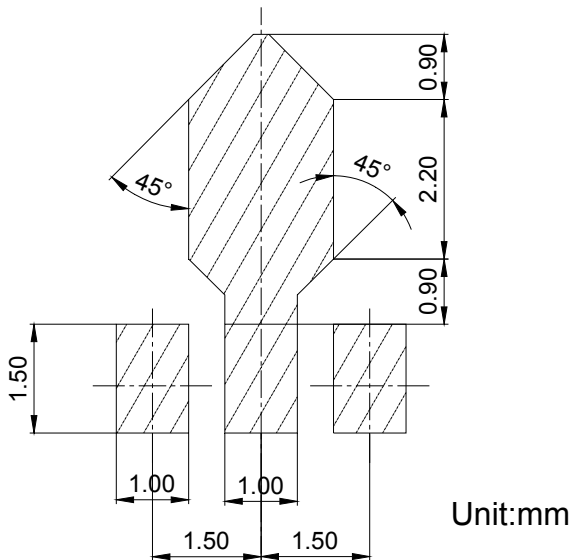
**PACKAGE OUTLINE**

Plastic surface mounted package

SOT-89



**SOLDERING FOOTPRINT**



**PACKAGE INFORMATION**

Device	Package	Shipping
PXT8050	SOT-89	1000/Tape&Reel