

NPN Switching Transistor

PXT2222A

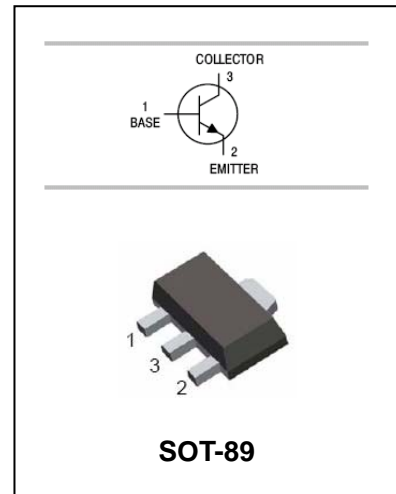
FEATURES

- High current.
- Low voltage.



APPLICATIONS

- General purpose switching and linear amplification.



ORDERING INFORMATION

Type No.	Marking	Package Code
PXT2222A	1P	SOT-89

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	75	V
V _{CEO}	Collector-Emitter Voltage	40	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current -Continuous	600	mA
I _{CM}	Peak Collector Current	800	mA
I _{BM}	Peak Base Current	200	mA
P _{tot}	Total Power Dissipation	1.25	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-65 to +150	°C



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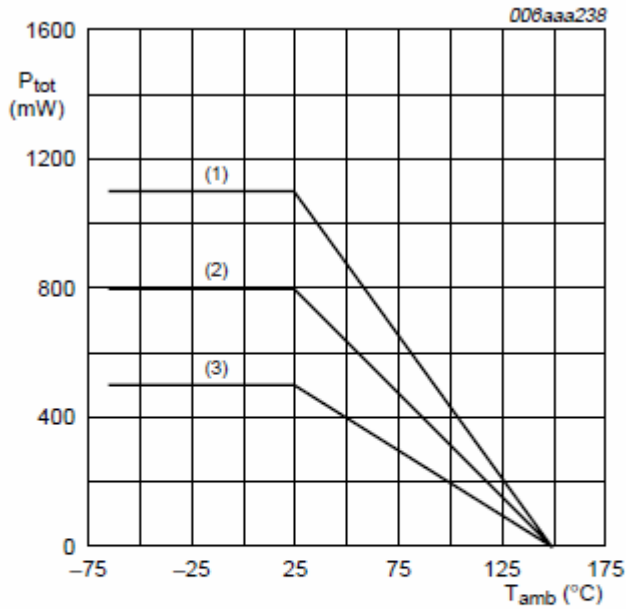
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	75		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	40		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	6		V
Collector cut-off current	I_{CBO}	$V_{CB}=60V, I_E=0$		10	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$		10	nA
DC current gain	h_{FE}	$V_{CE}=10V, I_C=0.1mA$ $V_{CE}=10V, I_C=1mA$ $V_{CE}=10V, I_C=10mA$ $V_{CE}=1V, I_C=150mA$ $V_{CE}=10V, I_C=150mA$ $V_{CE}=10V, I_C=500mA$	35 50 75 50 100 40	300	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=150mA, I_B=15mA$ $I_C=500mA, I_B=50mA$		0.3 1	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=150mA, I_B=15mA$ $I_C=500mA, I_B=50mA$	0.6	1.2 2	V
Transition frequency	f_T	$V_{CE}=10V, I_C=20mA,$ $f=100MHz$	300		MHz
Collector Capacitance	C_c	$V_{CB}=10V, f=1MHz, I_E=0$		8	pF
Emitter Capacitance	C_e	$V_{EB}=10V, f=1MHz, I_C=0$		25	pF
Noise Figure	F	$I_C=200\mu A, V_{CE}=5V, R_S=2k\Omega$ $F=1kHz, B=200Hz$		4	dB

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TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



- (1) FR4 PCB; 6 cm² mounting pad for collector.
- (2) FR4 PCB; 1 cm² mounting pad for collector.
- (3) FR4 PCB; standard footprint.

Power derating curves.



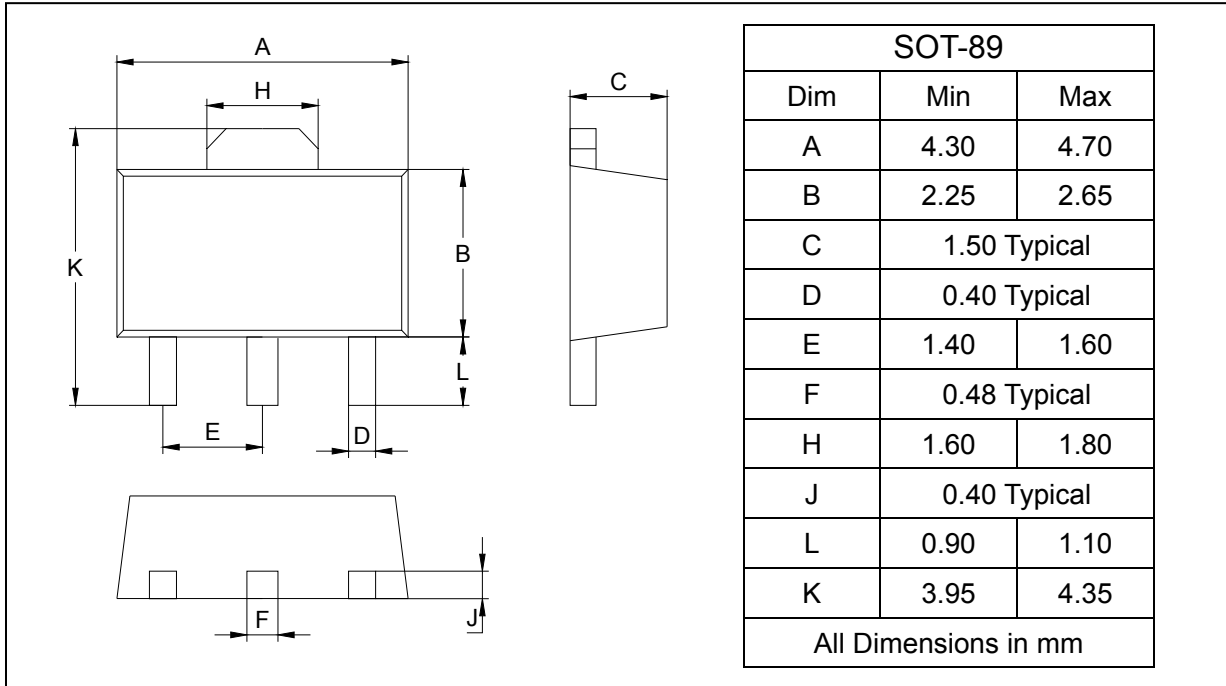
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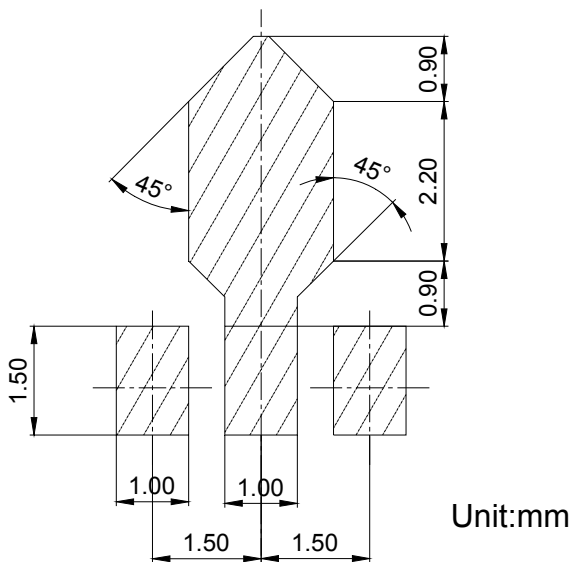
PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
PXT2222A	SOT-89	1000/Tape&Reel