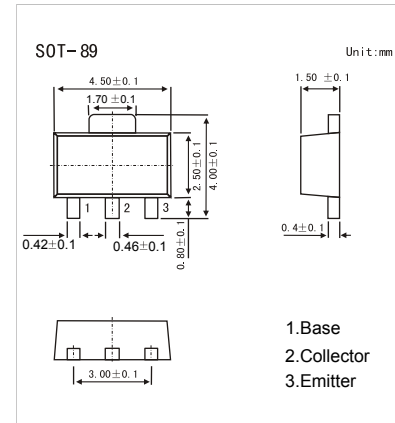


## NPN Transistors

### PXT2222A (KXT2222A)

#### ■ Features

- Epitaxial planar die construction
- Complementary to PXT2907A



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	75	V
Collector - Emitter Voltage	$V_{CE0}$	40	
Emitter - Base Voltage	$V_{EB0}$	6	
Collector Current - Continuous	$I_C$	600	mA
Collector Power Dissipation	$P_C$	500	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to 150	

#### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_C = 100 \mu\text{A}$ , $I_E = 0$	75			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = 10 \text{ mA}$ , $I_B = 0$	40			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = 100 \mu\text{A}$ , $I_C = 0$	6			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = 60 \text{ V}$ , $I_E = 0$			50	nA
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5 \text{ V}$ , $I_C = 0$			50	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500 \text{ mA}$ , $I_B = 50 \text{ mA}$			1	V
		$I_C = 500 \text{ mA}$ , $I_B = 15 \text{ mA}$			0.3	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 500 \text{ mA}$ , $I_B = 50 \text{ mA}$			2	
		$I_C = 500 \text{ mA}$ , $I_B = 15 \text{ mA}$		0.6	1.2	
	$h_{FE(1)}$	$V_{CE} = 10 \text{ V}$ , $I_C = 0.1 \text{ mA}$	50			
	$h_{FE(2)}$	$V_{CE} = 10 \text{ V}$ , $I_C = 10 \text{ mA}$	75			
	$h_{FE(3)}$	$V_{CE} = 10 \text{ V}$ , $I_C = 150 \text{ mA}$	100		300	
	$h_{FE(4)}$	$V_{CE} = 1 \text{ V}$ , $I_C = 150 \text{ mA}$	50			
	$h_{FE(5)}$	$V_{CE} = 10 \text{ V}$ , $I_C = 500 \text{ mA}$	40			
Delay time	$t_d$	$V_{CC} = 30 \text{ V}$ , $I_C = 150 \text{ mA}$			10	ns
Rise time	$t_r$	$V_{BE(off)} = 0.5 \text{ V}$ , $I_{B1} = 15 \text{ mA}$			25	
Storage time	$t_s$	$V_{CC} = 30 \text{ V}$ , $I_C = 150 \text{ mA}$			225	
Fall time	$t_f$	$I_{B1} = - I_{B2} = 15 \text{ mA}$			60	
Collector output capacitance	$C_{ob}$	$V_{CB} = 10 \text{ V}$ , $I_E = 0$ , $f = 1 \text{ MHz}$			8	pF
Transition frequency	$f_T$	$V_{CE} = 10 \text{ V}$ , $I_C = 20 \text{ mA}$ , $f = 100 \text{ MHz}$	300			MHz

#### ■ Marking

Marking	*1P
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# NPN Transistors

## PXT2222A (KXT2222A)

■ Typical Characteristics

