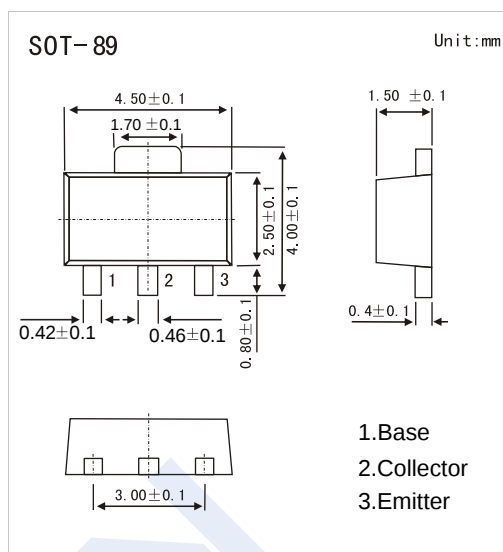


PNP Transistors

ZXTP2014Z (KXTP2014Z)

■ Features

- 3 amps continuous current
- Up to 10 amps peak current
- Very low saturation voltages
- Marking: 2014



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-180	V
Collector - Emitter Voltage	V_{CEO}	-140	
Emitter - Base Voltage	V_{EBO}	-7	
Collector Current - Continuous	I_C	-3	A
Peak Pulse Current	I_{CM}	-10	
Power Dissipation at $T_A=25^\circ\text{C}$ ^(a)	P_D	1.5	W
Power Dissipation at $T_A=25^\circ\text{C}$ ^(b)		2.1	
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	83	$^\circ\text{C/W}$
		60	
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

NOTES:

(a) For a device surface mounted on 25mm x 25mm x 1.6mm FR4 PCB with high coverage of single sided 1oz copper, in still air conditions.

(b) For a device surface mounted on 50mm x 50mm x 1.6mm FR4 PCB with high coverage of single sided 1oz copper, in still air conditions.

PNP Transistors

ZXTP2014Z (KXTP2014Z)

■ Electrical Characteristics Ta = 25°C

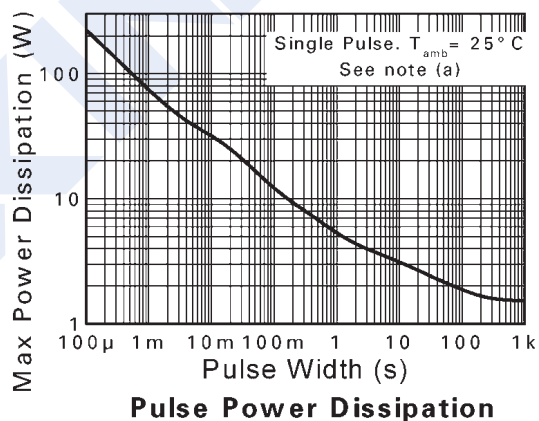
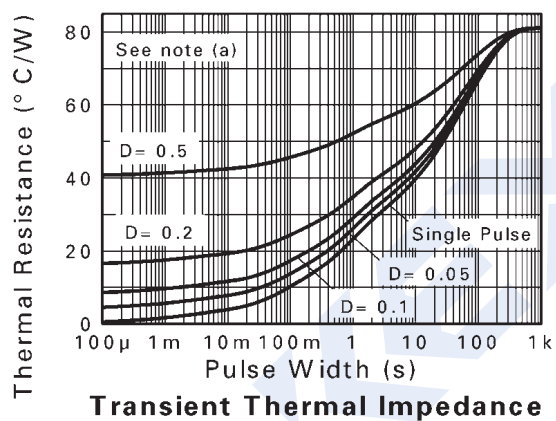
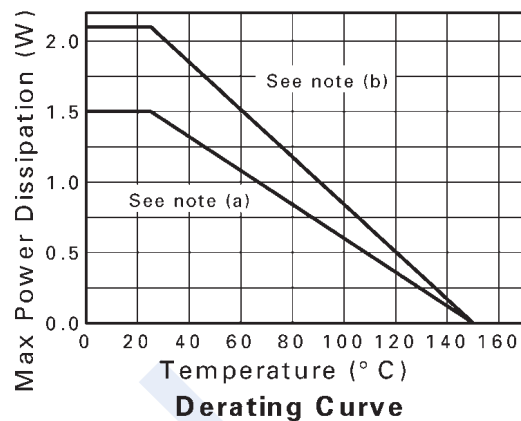
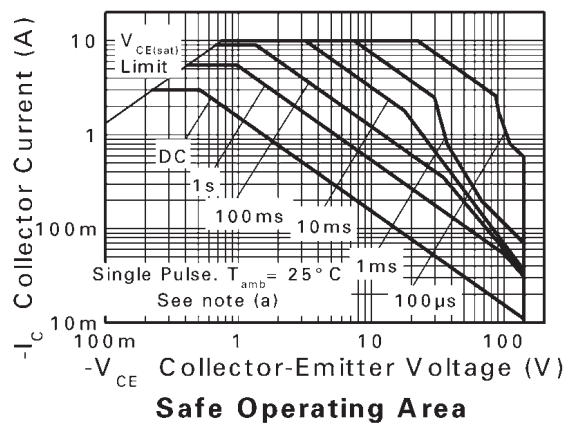
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CBO}	I _C = -100 μA, I _E = 0	-180			V
Collector-emitter breakdown voltage	V _{CER}	I _C = -1μA, R _B ≤ 1kΩ	-180			
Collector- emitter breakdown voltage	V _{CEO}	I _C = -10 mA*	-140			
Emitter - base breakdown voltage	V _{EBO}	I _E = -100μA, I _C = 0	-7			
Collector-base cut-off current	I _{CBO}	V _{CB} = -150V			-20	nA
		V _{CB} = -150 V, T _{amb} = 100°C			-0.5	μA
Collector- emitter cut-off current	I _{CER}	V _{CB} = -150V			-20	nA
		V _{CB} = -150V, T _{amb} = 100°C			-0.5	μA
Emitter cut-off current	I _{EBO}	V _{EB} = -6V, I _C = 0			-10	nA
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -0.1A, I _B = -5mA*			-60	mV
		I _C = -0.5A, I _B = -50mA*			-75	
		I _C = -1A, I _B = -100mA*			-115	
		I _C = -3A, I _B = -300mA*			-330	
Base - emitter saturation voltage	V _{BE(sat)}	I _C = -3A, I _B = -300mA*			-1010	
Base-emitter turn on voltage	V _{BE(ON)}	I _C = -3A, V _{CE} = -5V*			-900	
DC current gain	h _{FE}	I _C = -10mA, V _{CE} = -5V*	100			
		I _C = -1A, V _{CE} = -5V*	100		300	
		I _C = -3A, V _{CE} = -5V*	45			
		I _C = -10A, V _{CE} = -5V*		5		
Collector output capacitance	C _{obo}	V _{CB} = -10V, f = 1MHz*		33		pF
Switching times	t _{oN}	I _C = -1A, V _{CC} = -50V		42		ns
	t _{oFF}	I _{B1} = -I _{B2} = -100mA		636		
Transition frequency	f _T	I _C = -100mA, V _{CE} = -10V, f = 50MHz		120		MHz

* Measured under pulsed conditions. Pulse width ≤ 300μs; duty cycle ≤ 2%.

PNP Transistors

ZXTP2014Z (KXTP2014Z)

■ Typical Characteristics



PNP Transistors

ZXTP2014Z (KXTP2014Z)

■ Typical Characteristics

