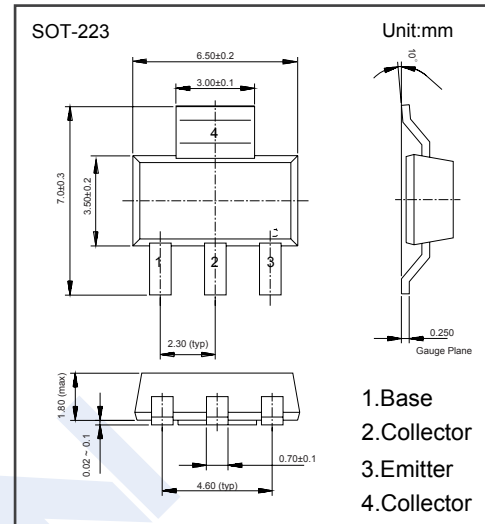


## PNP Transistors

## FZT749 (KZT749)

## ■ Features

- 25 Volt  $V_{CE0}$ .
- 3 Amp continuous current.
- Low saturation voltage.
- Excellent  $h_{FE}$  specified up to 6A .

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	-25	V
Collector - Emitter Voltage	$V_{CE0}$	-25	
Emitter - Base Voltage	$V_{EB0}$	-5	
Collector Current - Continuous	$I_C$	-3	A
Peak Pulse Current	$I_{CM}$	-6	
Collector Power Dissipation	$P_C$	2	W
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature range	$T_{stg}$	-55 to 150	

**FZT749 (KZT749)**

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Breakdown Voltages	V <sub>(BR)CBO</sub>	I <sub>C</sub> =-100uA	-35			V
Breakdown Voltages	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-10mA	-25			V
Breakdown Voltages	V <sub>(BR)EBO</sub>	I <sub>E</sub> =-100uA	-5			V
Collector Cut-Off Currents	I <sub>CBO</sub>	V <sub>CB</sub> =-30V V <sub>CB</sub> =-30V, Ta = 100°C			-0.1 -10	uA
Collector Cut-Off Currents	I <sub>EBO</sub>	V <sub>EB</sub> =4V			-0.1	uA
Saturation Voltages *	V <sub>CE(sat)</sub>	I <sub>C</sub> =-1A, I <sub>B</sub> =-100mA I <sub>C</sub> =-3A, I <sub>B</sub> =-300mA		-0.12 -0.40	-0.3 -0.6	V
Saturation Voltages *	V <sub>BE(sat)</sub>	I <sub>C</sub> =-1A, I <sub>B</sub> =-100mA		-0.9	-1.25	V
Base-emitter ON voltage *	V <sub>BE(on)</sub>	I <sub>C</sub> =-1A, V <sub>CE</sub> =-2V		-0.8	-1.0	V
Static Forward Current Transfer Ratio	h <sub>FE</sub>	I <sub>C</sub> =-50mA, V <sub>CE</sub> =-2V*	70	200		
		I <sub>C</sub> =-1A, V <sub>CE</sub> =-2V*	100	200	300	
		I <sub>C</sub> =-2A, V <sub>CE</sub> =-2V*	75	150		
		I <sub>C</sub> =-6A, V <sub>CE</sub> =-2V*	15	50		
Transitional frequency	f <sub>T</sub>	I <sub>C</sub> =-100mA, V <sub>CE</sub> =-5V, f=100MHz	100	160		MHz
Output capacitance	C <sub>obo</sub>	V <sub>CB</sub> =-10V, f=1MHz		55	100	pF
Turn-on time	t <sub>(on)</sub>	I <sub>C</sub> =-500mA, V <sub>CC</sub> =-10V		40		ns
Turn-off time	t <sub>(off)</sub>	I <sub>B1</sub> =I <sub>B2</sub> =-50mA		450		ns

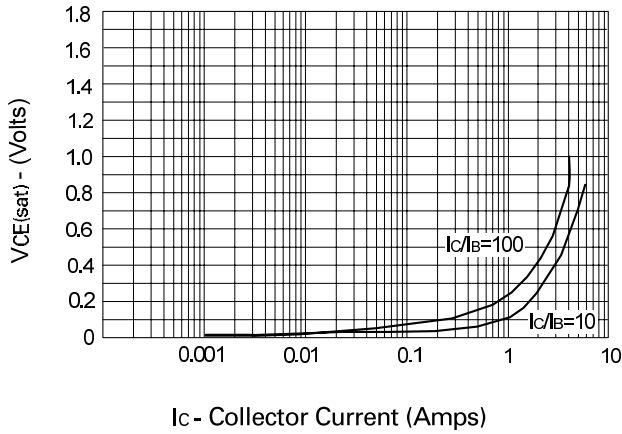
\* Pulse test: t<sub>p</sub> = 300 us; d ≤ 0.02.

## ■ Marking

Marking	FZT749
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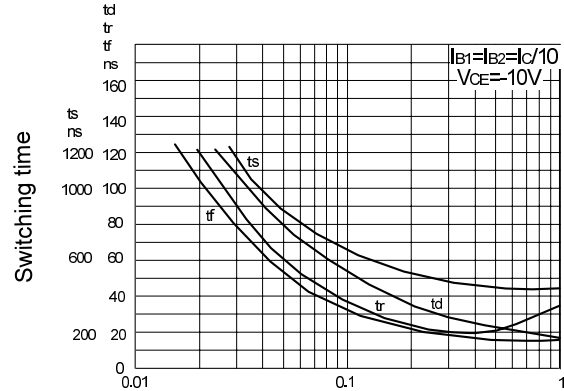
**FZT749 (KZT749)**

■ Typical Characteristics



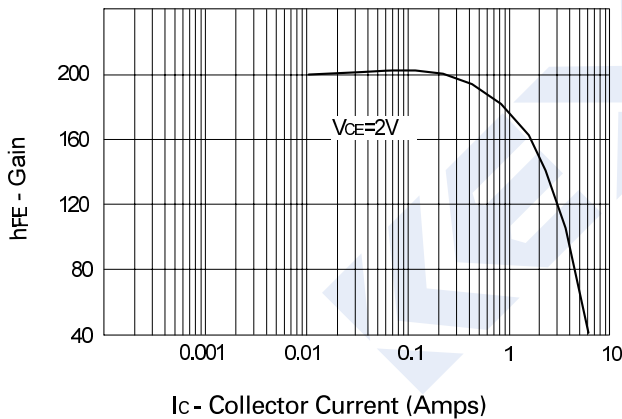
IC - Collector Current (Amps)

**VCE(sat) v IC**



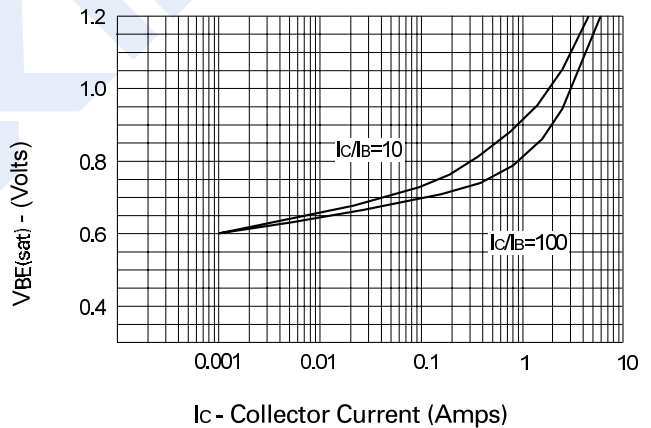
IC - Collector Current (Amps)

**Switching Speeds**



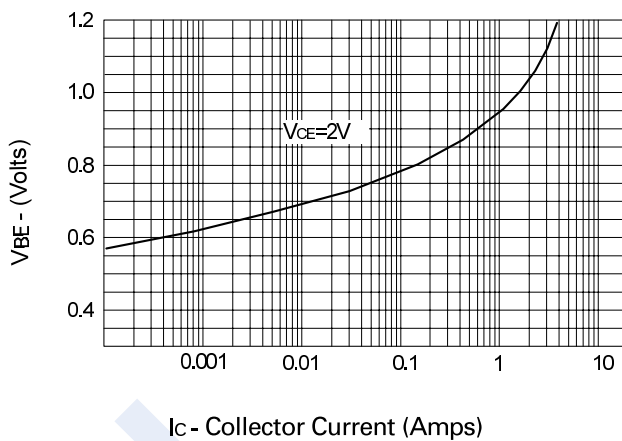
IC - Collector Current (Amps)

**hFE v IC**



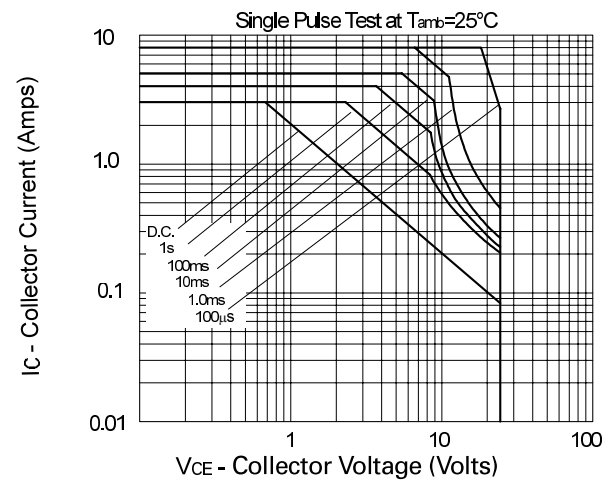
IC - Collector Current (Amps)

**VBE(sat) v IC**



IC - Collector Current (Amps)

**VBE(on) v IC**



**Safe Operating Area**