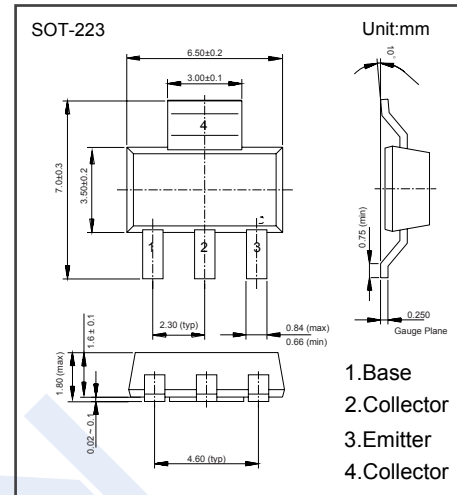


NPN Transistors

FZT1047A (KZT1047A)

■ Features

- Collector Current Capability $I_c=5A$
- Collector Emitter Voltage $V_{CE0}=10V$
- Low Saturation Voltage



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	35	V
Collector - Emitter Voltage	V_{CE0}	10	
Emitter - Base Voltage	V_{EB0}	5	
Collector Current - Continuous	I_c	5	A
Collector Current - Pulse	I_{CP}	20	
Collector Power Dissipation	P_c	2.5	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 to 150	

NPN Transistors

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■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = 100 μA, I _E = 0	35			V
Collector- emitter breakdown voltage	V _{CES}	I _c = 100 uA, I _B = 0	35			
Collector- emitter breakdown voltage	V _{CEO}	I _c = 1 mA, I _B = 0	10			
Collector- emitter breakdown voltage	V _{CEV}	I _c = 1 mA, V _{EB} = 1V	35			
Emitter - base breakdown voltage	V _{EBO}	I _E = 100 uA, I _c = 0	5			nA
Collector-base cut-off current	I _{CBO}	V _{CB} = 20 V , I _E = 0			10	
Collector- emitter cut-off current	I _{CES}	V _{CES} = 20 V , I _E = 0			10	
Emitter cut-off current	I _{EBO}	V _{EB} = 4V , I _c =0			10	mV
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =500 mA, I _B =10mA			40	
		I _c =1 A, I _B =10mA			70	
		I _c =3 A, I _B =15mA			200	
		I _c =5 A, I _B =25mA			350	
Base - emitter saturation voltage	V _{BE(sat)}	I _c =5 A, I _B =25mA			1000	
Base - emitter turn-on voltage	V _{BE(on)}	V _{CE} = 2V, I _c = 5A			975	
DC current gain	h _{FE}	V _{CE} = 2V, I _c = 10mA	280			
		V _{CE} = 2V, I _c = 500mA	290			
		V _{CE} = 2V, I _c = 1A	300		1200	
		V _{CE} = 2V, I _c = 5A	200			
		V _{CE} = 2V, I _c = 20A	60			
Turn-on time	t _{on}	I _c =4A, I _B =40mA, V _{CC} =10V		130		ns
Turn-off time	t _{off}	I _c =4A, I _B =±40mA, V _{CC} =10V		230		
Collector output capacitance	C _{ob}	V _{CB} = 10V, f=1MHz			110	pF
Transition frequency	f _T	V _{CE} = 10V, I _c = 50mA, f=50MHz		150		MHz

Note. Pulse width=300us. Duty cycle ≤ 2%

■ Marking

Marking	1047A K****
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■ Typical Characteristics

