

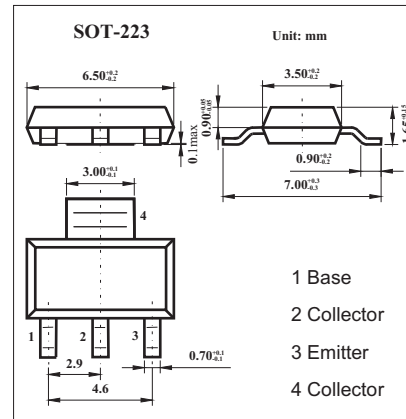
NPN Silicon Planar Medium Power Transistor

FZT491

Features

Power Dissipation: $P_c=2W$

Continuous Collector Current: $I_c=1A$



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	80	V
Collector-emitter voltage	V_{CE0}	60	V
Emitter-base voltage	V_{EB0}	5	V
Continuous Collector Current	I_c	1	A
power dissipation	P_c	2	W
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collector to base breakdown voltage	V_{CB0}	$I_c=100 \mu A$	80			V
Collector to emitter breakdown voltage	V_{CE0}	$I_c=10mA$	60			V
Emitter to base breakdown voltage	V_{EB0}	$I_E=100 \mu A$	5			V
Collector cutoff current	I_{CBO}	$V_{CB} = 60 V, I_E = 0$			100	nA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=4V, I_c=0$			100	nA
DC current gain	h_{FE}	$I_c = 1.0 mA; V_{CE} = 5V$	100			
		$I_c = 500mA; V_{CE} = 5V$	100		300	
		$I_c = 1A; V_{CE} = 5V$	80			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_c = 500mA; I_B = 50mA$			0.25	V
		$I_c = 1A; I_B = 100mA$			0.5	V
Output capacitance	C_{ob}	$V_{CB} = 10 V, I_E = 0, f=1.0MHz$			10	pF
Transition frequency	f_T	$I_c = 50 mA; V_{CE} = 10V; f = 100 MHz$	150			MHz

Marking

Marking	491
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