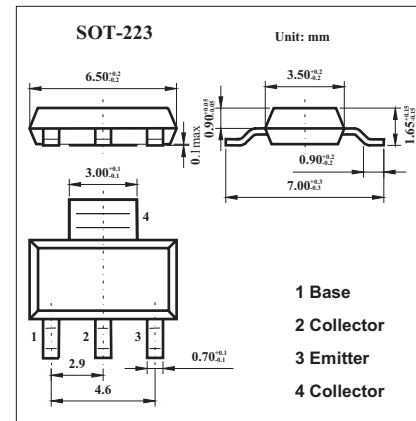


PNP Current Driver Transistor

NZT753

■ Features



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

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CE0}	-100	V
Collector-Base Voltage	V_{CBO}	-120	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-4	A
Operating and Storage Junction Temperature Range	T_J, T_{STG}	- 55 to +150	$^\circ\text{C}$
Total Device Dissipation	P_D	1.2	W
Derate above 25°C		9.7	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	103	$^\circ\text{C}/\text{W}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$ unless otherwise stated

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	BV_{CE0}	$I_C = -10\text{mA}, I_B = 0$	-100			V
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = -100\mu\text{A}, I_E = 0$	-120			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -100\mu\text{A}, I_C = 0$	-5.0			V
Collector-Base Cutoff Current	I_{CBO}	$V_{CB} = -100\text{V}, I_E = 0$			-0.1	μA
		$T_A = 100^\circ\text{C}$			-10	μA
Emitter-Base Cutoff Current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = -2.0\text{V}, I_C = -50\text{mA}$	70			
		$V_{CE} = -2.0\text{V}, I_C = -500\text{mA}$	100		300	
		$V_{CE} = -2.0\text{V}, I_C = -1.0\text{A}$	55			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -1.0\text{A}, I_B = -50\text{mA}$			-0.3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -1.0\text{A}, I_B = -100\text{mA}$			-1.25	V
Base-Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = -2.0\text{V}, I_C = -1.0\text{A}$			-1.0	V
Transition Frequency	f_T	$V_{CE} = -5\text{V}, I_C = -100\text{mA}, f = 100\text{MHz}$	75			MHz

*Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2.0\%$