

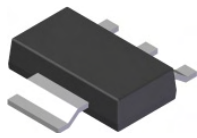
SOT223 PNP SILICON PLANAR HIGH PERFORMANCE TRANSISTOR

Features

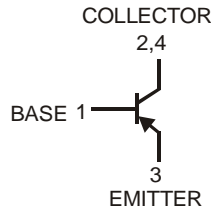
- $V_{CE0} = 60V$
- Continuous current $I_{C(cont)} = 3A$
- Low Saturation Voltage
- Complementary Type – FZT651

Mechanical Data

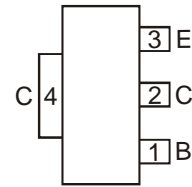
- Case: SOT-223
- UL Flammability Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Matte Tin Finish
- Weight: 0.112 grams (approximate)



Top View



Device Schematic



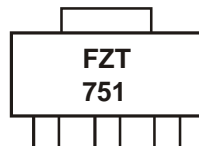
Pin Out Configuration

Ordering Information

Product	Marking	Reel size (inches)	Tape width (mm)	Quantity per reel
FZT751TA	FZT751	7	12	1000
FZT751-7 (Note 1)	FZT751	7	12	1000

Notes: 1. "Green" version.

Marking Information



FZT751 = Product type Marking Code

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Collector-Base Voltage	V_{CB0}	-80	V
Collector-Emitter Voltage	V_{CEO}	-60	V
Emitter-Base Voltage	V_{EBO}	-5	V
Continuous Collector Current	I_C	-3	A
Peak Pulse Current	I_{CM}	-6	A

Thermal Characteristics

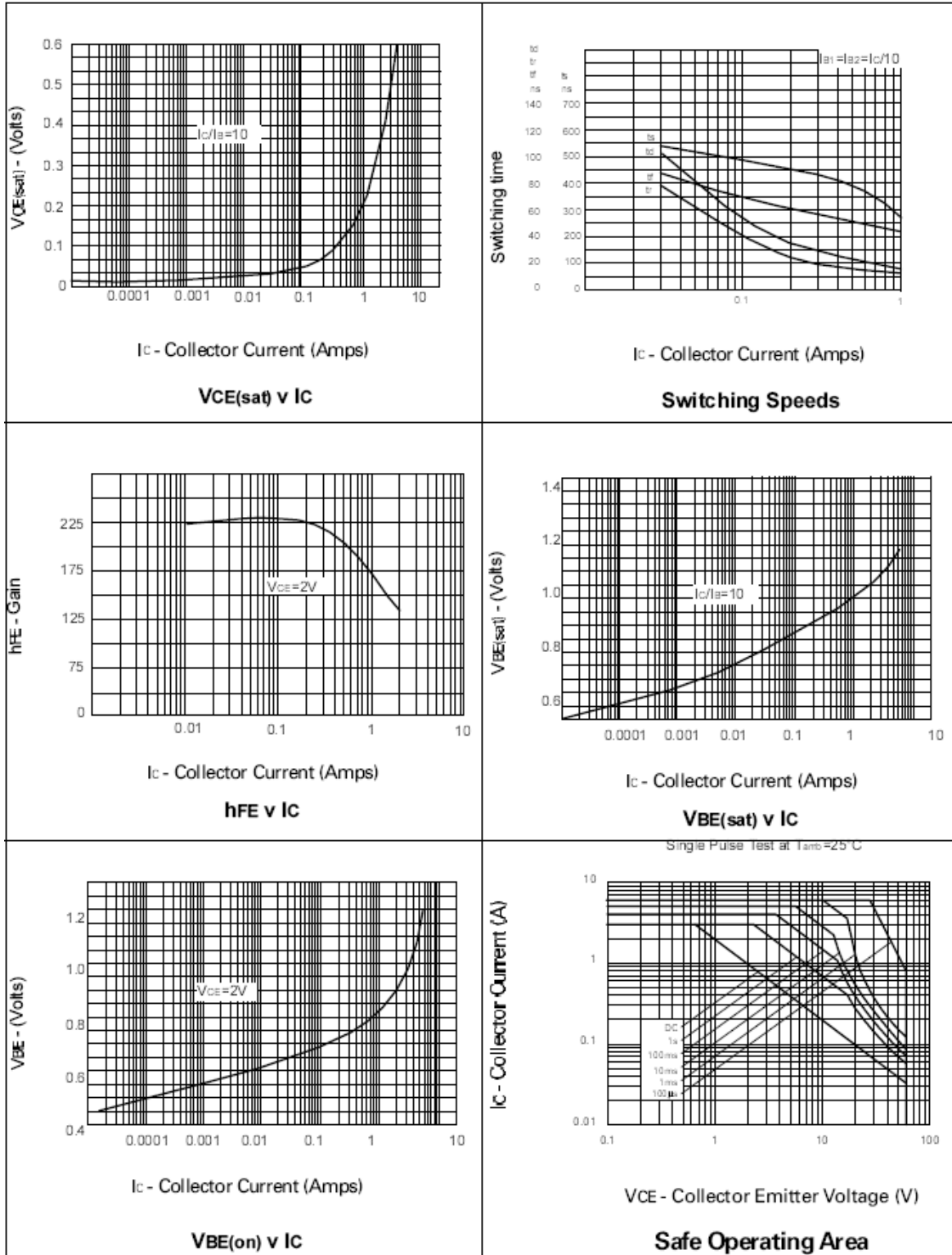
Characteristic	Symbol	Value	Unit
Power Dissipation at $T_A = 25^\circ\text{C}$	P_D	2	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

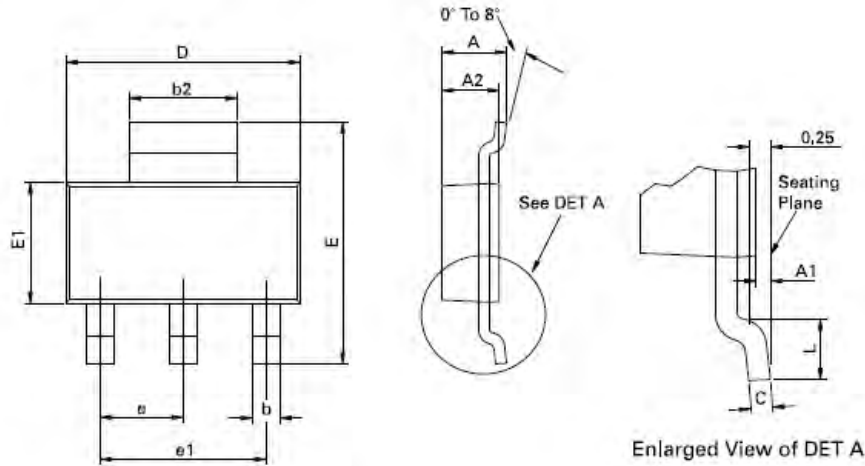
Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-80	-	-	V	$I_C = -100\mu\text{A}$
Collector-Emitter Breakdown Voltage (Note 2)	$V_{(BR)CEO}$	-60	-	-	V	$I_C = -10\text{mA}$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E = 100\mu\text{A}$
Collector Cut-off Current	I_{CBO}	-	-	-0.1 -10	μA	$V_{CB} = -60\text{V}$ $V_{CB} = -60\text{V}, T_{amb} = 100^\circ\text{C}$
Emitter Cut-off Current	I_{EBO}	-	-	-0.1	μA	$V_{EB} = -4\text{V}$
Collector-Emitter Saturation Voltage (Note 2)	$V_{CE(SAT)}$	-	-0.15 -0.45	0.3 0.6	V	$I_C = -1\text{A}, I_B = -100\text{mA}$ $I_C = -3\text{A}, I_B = -300\text{mA}$
Base-Emitter Saturation Voltage (Note 2)	$V_{CE(SAT)}$	-	-0.9	-1.25	V	$I_C = -1\text{A}, I_B = -100\text{mA}$
Base-Emitter Turn-On Voltage (Note 2)	$V_{BE(ON)}$	-	-0.8	-1.0	mV	$I_C = -1\text{A}, V_{CE} = -2\text{V}$
DC Current Gain (Note 2)	h_{FE}	70 100 80 40	200 200 170 150	- 300 - -		$I_C = -50\text{mA}, V_{CE} = -2\text{V}$ $I_C = -500\text{mA}, V_{CE} = -2\text{V}$ $I_C = -1\text{A}, V_{CE} = -2\text{V}$ $I_C = -2\text{A}, V_{CE} = -2\text{V}$
Current Gain-Bandwidth Product (Note 2)	f_T	100	140	-	MHz	$V_{CE} = -5\text{V}, I_C = -100\text{mA}$ $f = 100\text{MHz}$
Turn-On Time	t_{on}	-	40	-	nA	$V_{CC} = -10\text{V}, I_C = -500\text{mA}$
Turn-Off Time	t_{off}	-	450	-	nA	$I_{B1} = I_{B2} = -50\text{mA}$
Output Capacitance (Note 2)	C_{obo}	-	-	30	pF	$V_{CB} = -10\text{V}, f = 1\text{MHz}$

Notes: 2. Measured under pulsed conditions. Pulse width = 300 μs . Duty cycle $\leq 2\%$

Typical Characteristics



Package Outline Dimensions

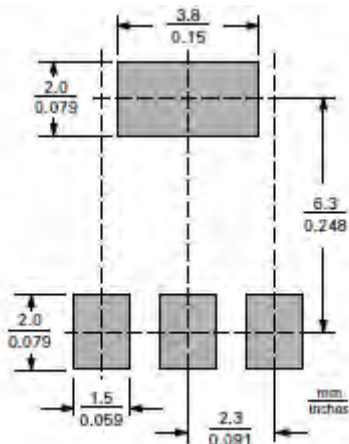


Conforms to JEDEC TO-261 AA Issue B

Dim.	Millimeters		Inches		Dim.	Millimeters		Inches	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	-	1.80	-	0.071	D	6.30	6.70	0.248	0.264
A1	0.02	0.10	0.0008	0.004	e	2.30 BSC		0.0905 BSC	
A2	1.55	1.65	0.0610	0.0649	e1	4.60 BSC		0.181 BSC	
b	0.66	0.84	0.026	0.033	E	6.70	7.30	0.264	0.287
b2	2.90	3.10	0.114	0.122	E1	3.30	3.70	0.130	0.146
C	0.23	0.33	0.009	0.013	L	0.90	-	0.035	-

Note: Controlling dimensions are in millimeters. Approximate dimensions are provided in inches

Suggested Pad Layout



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