

**FZT751**

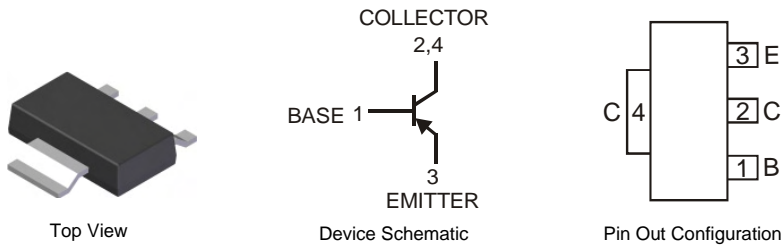
**SOT223 PNP SILICON PLANAR HIGH PERFORMANCE TRANSISTOR**

**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)

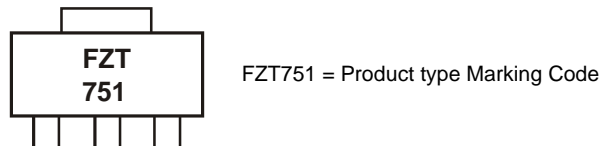


**Ordering Information**

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**



**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**

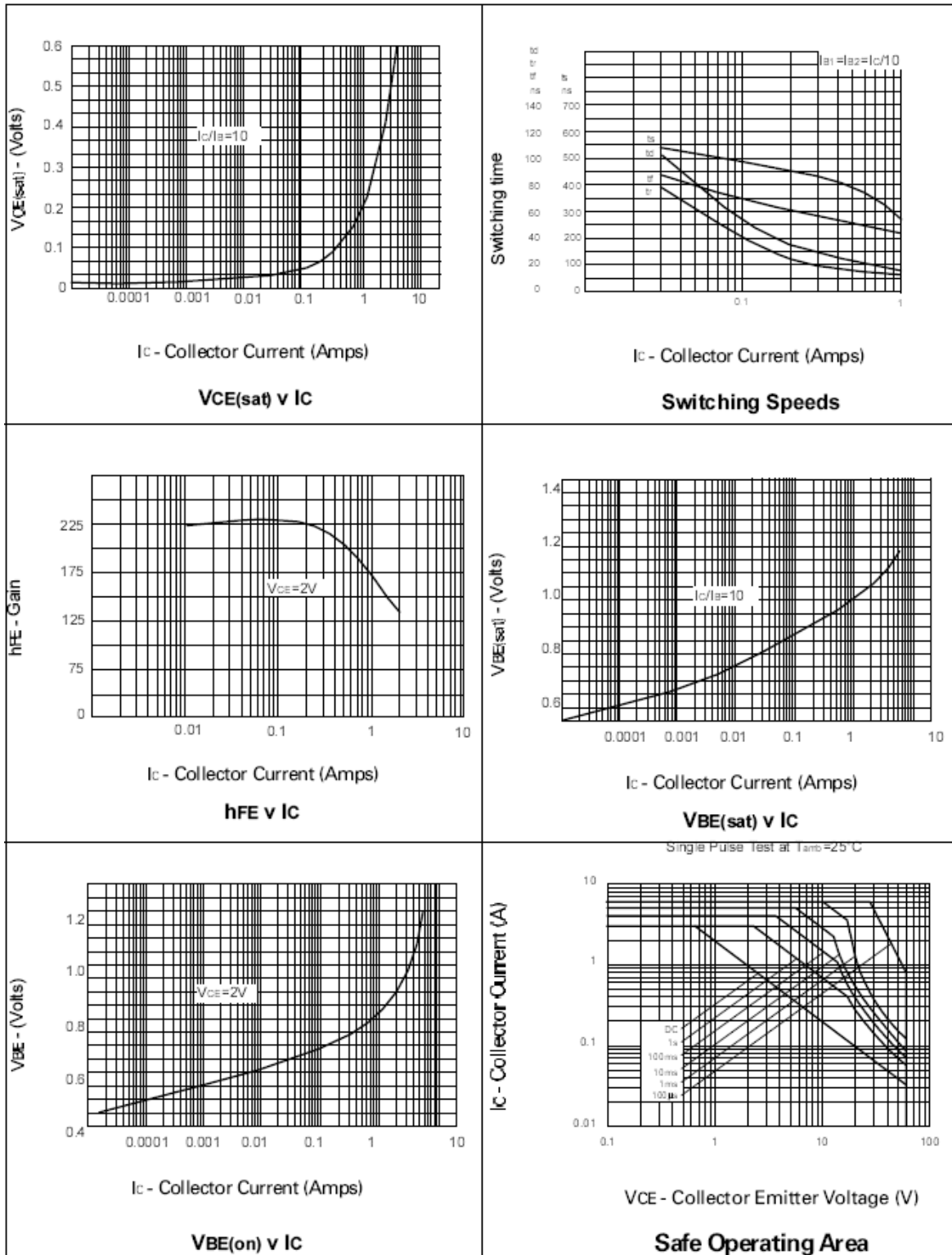
Characteristic	Symbol	Value	Unit
Power Dissipation at $T_A = 25^\circ\text{C}$	$P_D$	2	W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

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

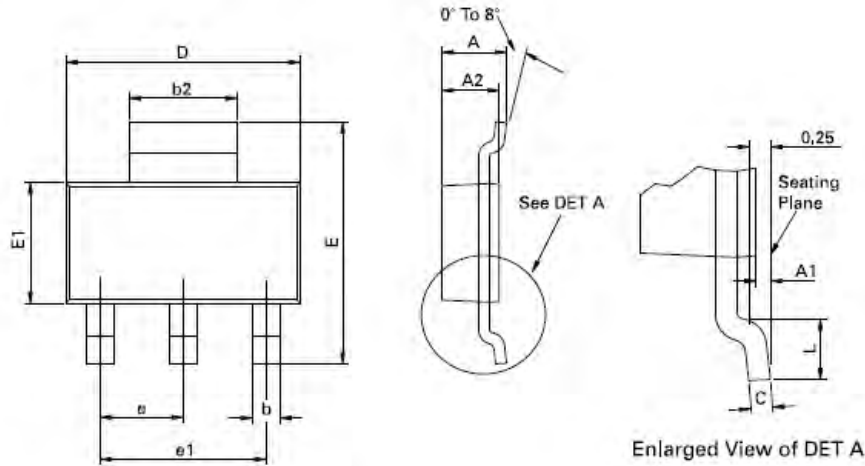
Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-80	-	-	V	$I_C = -100\mu\text{A}$
Collector-Emitter Breakdown Voltage (Note 2)	$V_{(BR)CEO}$	-60	-	-	V	$I_C = -10\text{mA}$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E = 100\mu\text{A}$
Collector Cut-off Current	$I_{CBO}$	-	-	-0.1 -10	$\mu\text{A}$	$V_{CB} = -60\text{V}$ $V_{CB} = -60\text{V}, T_{amb} = 100^\circ\text{C}$
Emitter Cut-off Current	$I_{EBO}$	-	-	-0.1	$\mu\text{A}$	$V_{EB} = -4\text{V}$
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  $\mu\text{s}$ . Duty cycle  $\leq 2\%$

**Typical Characteristics**



**Package Outline Dimensions**

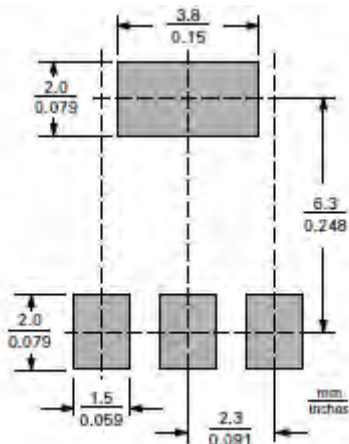


Conforms to JEDEC TO-261 AA Issue B

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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