

PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

FXT751

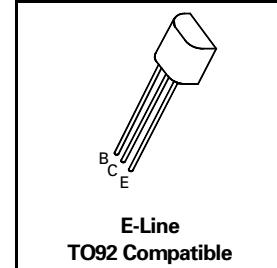
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FEATURES

- * 60 Volt V_{CEO}
- * 2 Amp continuous current
- * $P_{tot}=1$ Watt

APPLICATIONS

- * Lamp, relay or solenoid drivers
 - * Audio circuits
 - * Replacement of TO126 and TO220 parts
- REFER TO ZTX751 FOR GRAPHS



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Emitter Voltage	V_{CEO}	-60	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-6	A
Continuous Collector Current	I_C	-2	A
Power Dissipation at $T_{amb}=25^\circ\text{C}$	P_{tot}	1	W
Operating and Storage Temperature Range	$T_J:T_{stg}$	-55 to +200	°C

ELECTRICAL CHARACTERISTICS (at $T_{amb}=25^\circ\text{C}$ unless otherwise stated).

PARAMETER	SYMBOL	MIN.	Typ.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-80			V	$I_C=100\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-60			V	$I_C=10\text{mA}, I_B=0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	$I_E=100\mu\text{A}, I_C=0$
Collector Cut-Off Current	I_{CBO}			-0.1 -10	μA	$V_{CB}=-60\text{V}, I_E=0$ $V_{CB}=-60\text{V}, T_{amb}=100^\circ\text{C}$
Emitter Cut-Off Current	I_{EBO}			-0.1	μA	$V_{EB}=-4\text{V}, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(\text{sat})}$		-0.15 -0.28	-0.3 -0.5	V	$I_C=1\text{A}, I_B=100\text{mA}^*$ $I_C=2\text{A}, I_B=200\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(\text{sat})}$		-0.90	-1.25	V	$I_C=1\text{A}, I_B=100\text{mA}^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		-0.8	-1.0	V	$I_C=1\text{A}, V_{CE}=-2\text{V}^*$
Static Forward Current Transfer Ratio	h_{FE}	70 100 80 40	200 200 170 150	300		$I_C=50\text{mA}, V_{CE}=-2\text{V}^*$ $I_C=500\text{mA}, V_{CE}=-2\text{V}^*$ $I_C=1\text{A}, V_{CE}=-2\text{V}^*$ $I_C=2\text{A}, V_{CE}=-2\text{V}^*$
Transition Frequency	f_T	100	140		MHz	$I_C=100\text{mA}, V_{CE}=-5\text{V}$ $f=100\text{MHz}$
Output Capacitance	C_{obo}			30	pF	$V_{CB}=-10\text{V}, f=1\text{MHz}$

*Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤2%