

# PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

## FXT753

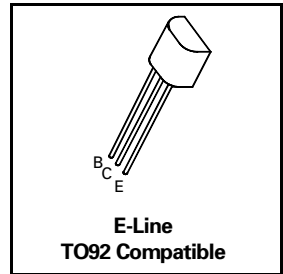
ISSUE 1 – FEB 94

### FEATURES

- \* 100 Volt  $V_{CEO}$
- \* 2 Amp continuous current
- \*  $P_{tot} = 1$  Watt

### APPLICATIONS

- \* Lamp, relay or solenoid drivers
  - \* Audio circuits
  - \* Replacement of TO126 and TO220 devices
- REFER TO ZTX753 FOR GRAPHS



### ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	$V_{CBO}$	-120	V
Collector-Emitter Voltage	$V_{CEO}$	-100	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	$^\circ\text{C}$

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-120			V	$I_C = -100\mu\text{A}$ , $I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-100			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	$\mu\text{A}$ $\mu\text{A}$	$V_{CB} = -100\text{V}$ , $I_E = 0$ $V_{CB} = -100\text{V}$ , $T_{amb} = 100^\circ\text{C}$
Emitter Cut-Off Current	$I_{EBO}$			-0.1	$\mu\text{A}$	$V_{EB} = -4\text{V}$ , $I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.17 -0.30	-0.3 -0.5	V 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	$V_{BE(sat)}$		-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 55 25	200 200 170 55	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=300 $\mu\text{s}$ . Duty cycle  $\leq 2\%$



LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

[LittleDiode.com](http://LittleDiode.com)

Looking forward to providing you with the best possible service.