

# NPN SILICON PLANAR MEDIUM POWER TRANSISTOR

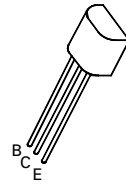
## FXT453

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### FEATURES

- \* 100 Volt  $V_{CE0}$
- \* 1 Amp continuous current
- \*  $P_{tot} = 1$  Watt

REFER TO ZTX453 FOR GRAPHS



E-Line  
TO92 Compatible

### 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	$I_{CM}$	2	A
Continuous Collector Current	$I_C$	1	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 $T_{amb} = 25^\circ\text{C}$ ).

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 Sustaining Voltage	$V_{CEO(sus)}$	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	$\mu\text{A}$	$V_{CB} = 100\text{V}$ , $I_E = 0$
Emitter Cut-Off Current	$I_{EBO}$			0.1	$\mu\text{A}$	$V_{EB} = 4\text{V}$ , $I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.7	V	$I_C = 150\text{mA}$ , $I_B = 15\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			1.3	V	$I_C = 150\text{mA}$ , $I_B = 15\text{mA}^*$
Static Forward Current Transfer Ratio	$h_{FE}$	40 10		200		$I_C = 150\text{mA}$ , $V_{CE} = 10\text{V}^*$ $I_C = 1\text{A}$ , $V_{CE} = 10\text{V}^*$
Transition Frequency	$f_T$	150			MHz	$I_C = 50\text{mA}$ , $V_{CE} = 10\text{V}$ $f = 100\text{MHz}$
Output Capacitance	$C_{obo}$			15	pF	$V_{CB} = 10\text{V}$ , $f = 1\text{MHz}$