

# NPN SILICON PLANAR MEDIUM POWER TRANSISTOR

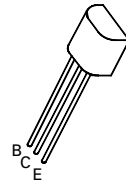
## FXT453

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### FEATURES

- \* 100 Volt  $V_{CEO}$
- \* 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 $T_{amb}=25^{\circ}C$	$P_{tot}$	1	W
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +200	$^{\circ}C$

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	120			V	$I_C = 100\mu A, I_E = 0$
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	100			V	$I_C = 10mA, I_B = 0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5			V	$I_E = 100\mu A, I_C = 0$
Collector Cut-Off Current	$I_{CBO}$			0.1	$\mu A$	$V_{CB} = 100V, I_E = 0$
Emitter Cut-Off Current	$I_{EBO}$			0.1	$\mu A$	$V_{EB} = 4V, I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.7	V	$I_C = 150mA, I_B = 15mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			1.3	V	$I_C = 150mA, I_B = 15mA^*$
Static Forward Current Transfer Ratio	$h_{FE}$	40 10		200		$I_C = 150mA, V_{CE} = 10V^*$ $I_C = 1A, V_{CE} = 10V^*$
Transition Frequency	$f_T$	150			MHz	$I_C = 50mA, V_{CE} = 10V$ $f = 100MHz$
Output Capacitance	$C_{obo}$			15	pF	$V_{CB} = 10V, f = 1MHz$