

NPN SILICON PLANAR MEDIUM POWER TRANSISTOR

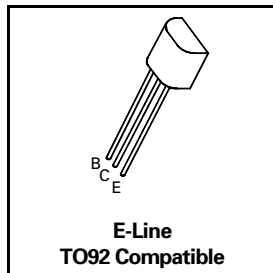
FXT451

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FEATURES

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

REFER TO ZTX451 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}	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	$V_{(BR)CBO}$	80			V	$I_C=100\mu\text{A}, I_E=0$
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	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	μA	$V_{CB}=60\text{V}, I_E=0$
Emitter Cut-Off Current	I_{EBO}			0.1	μA	$V_{EB}=4\text{V}, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.35	V	$I_C=150\text{mA}, I_B=15\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			1.1	V	$I_C=150\text{mA}, I_B=15\text{mA}^*$
Static Forward Current Transfer Ratio	h_{FE}	50 10		150		$I_C=150\text{mA}, V_{CE}=10\text{V}^*$ $I_C=1\text{A}, V_{CE}=10\text{V}^*$
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	$V_{CB}=10\text{V}, f=1\text{MHz}$