

PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

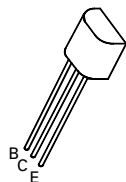
FXT550

ISSUE 1 – SEPT 93

FEATURES

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

REFER TO ZTX550 FOR GRAPHS



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-45	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	$V_{(BR)CBO}$	-60			V	$I_C = -100\mu\text{A}$, $I_E = 0$
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	-45			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	$V_{CB} = -45\text{V}$, $I_E = 0$
Emitter Cut-Off Current	I_{EBO}			-0.1	μA	$V_{EB} = -4\text{V}$, $I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.25	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}	100 15		300		$I_C = -150\text{mA}$, $V_{CE} = -10\text{V}^*$ $I_C = -1\text{A}$, $V_{CE} = -10\text{V}^*$
Transition Frequency	f_T	150			MHz	$I_C = -50\text{mA}$, $V_{CE} = -10\text{V}$ $f = 100\text{MHz}$
Output Capacitance	C_{obo}			25	pF	$V_{CB} = -10\text{V}$, $f = 1\text{MHz}$

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$