

NPN SILICON PLANAR
MEDIUM POWER TRANSISTOR

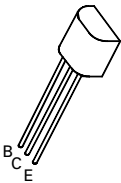
FXT453

ISSUE 1 – SEPT 93

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	μA	$V_{CB}=100V, I_E=0$
Emitter Cut-Off Current	I_{EBO}			0.1	μA	$V_{EB}=4V, I_C=0$
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	$V_{CB}=10V, f=1MHz$