

PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

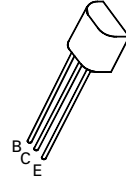
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FEATURES

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

REFER TO ZTX553 FOR GRAPHS

FXT553



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	$V_{CE(sat)}$			-0.25	V	$I_C = -150mA, I_B = -15mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-1.1	V	$I_C = -150mA, I_B = -15mA^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$			-1	V	$I_C = -150mA, V_{CE} = -10V$
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}			12	pF	$V_{CB} = -10V, f = 1MHz$

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