

PNP SILICON PLANAR

MEDIUM POWER TRANSISTOR

ISSUE 1 – JULY 94

ZTX776

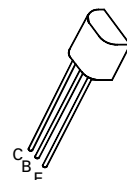
FEATURES

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

REFER TO ZTX755 FOR GRAPHS

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-200	V
Collector-Emitter Voltage	V_{CEO}	-200	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 $T_{amb}=25^{\circ}C$ derate above $T_{amb}=25^{\circ}C$	P_{tot}	1 5.7	W mW/ $^{\circ}C$
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +200	$^{\circ}C$



E-Line
TO92 Compatible

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

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-200		V	$I_C = -100\mu A, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-200		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}		-100	nA	$V_{CB} = -160V, I_E = 0$
Emitter Cut-Off Current	I_{EBO}		-100	nA	$V_{EB} = -4V, I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.5 -0.5	V V	$I_C = -500mA, I_B = -50mA^*$ $I_C = -1A, I_B = -200mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.1	V	$I_C = -500mA, I_B = -50mA^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		-1.0	V	$I_C = -500mA, V_{CE} = -5V^*$
Static Forward Current Transfer Ratio	h_{FE}	50 50 20			$I_C = -10mA, V_{CE} = -5V$ $I_C = -500mA, V_{CE} = -5V^*$ $I_C = -1A, V_{CE} = -5V^*$
Transition Frequency	f_T	30		MHz	$I_C = -10mA, V_{CE} = -20V$ $f = 20MHz$
Output Capacitance	C_{obo}		20	pF	$V_{CB} = -20V, f = 1MHz$

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