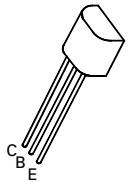
PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

ISSUE 1 – JULY 94

ZTX776

FEATURES

* 200 Volt V_{CEO}
* 1 Amp continuous current
* P_{tot}= 1 Watt



E-Line
TO92 Compatible

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°C derate above T_{amb}=25°C	P_{tot}	1 5.7	W mW/ °C
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +200	°C

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-200		V	I_C=-100μA, 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=-100μA, 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	IC=-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=300μs. Duty cycle ≤2%