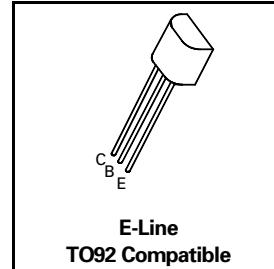


**NPN SILICON PLANAR  
MEDIUM POWER TRANSISTOR**

ISSUE 2 – MARCH 94

**ZTX337C**



**ABSOLUTE MAXIMUM RATINGS.**

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	$V_{CBO}$	50	V
Collector-Emitter Voltage	$V_{CEO}$	45	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Base Current	$I_B$	100	mA
Continuous Collector Current	$I_C$	800	mA
Power Dissipation	$P_{tot}$	750	mW
Operating and Storage Temperature Range	$T_j:T_{stg}$	-55 to +175	°C

**ELECTRICAL CHARACTERISTICS (at  $T_{amb} = 25^\circ\text{C}$  unless otherwise stated).**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	50			V	$I_C=100\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CES}$	45			V	$I_C=100\mu\text{A}$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5			V	$I_E=100\mu\text{A}$
Collector Cut-Off Current	$I_{CBO}$			100	nA	$V_{CB}=45\text{V}, I_E=0$
Collector-Emitter Saturation Voltage	$V_{CE(\text{sat})}$			0.7	V	$I_C=500\text{mA}, I_B=50\text{mA}^*$
Base-Emitter Turn On Voltage	$V_{BE(\text{on})}$			1.2	V	$I_C=300\text{mA}, V_{CE}=1\text{V}^*$
Static Forward Current Transfer	$h_{FE}$	250 170		630		$I_C=100\text{mA}, V_{CE}=1\text{V}^*$ $I_C=300\text{mA}, V_{CE}=1\text{V}^*$
Transition Frequency	$f_T$		200		MHz	$I_C=10\text{mA}, V_{CE}=5\text{V}$ $f=50\text{MHz}$
Output Capacitance	$C_{obo}$		12		pF	$V_{CB}=10\text{V}, f=1\text{MHz}$

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