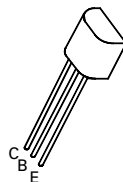


NPN SILICON PLANAR MEDIUM POWER TRANSISTOR

ISSUE 2 – MARCH 94

ZTX337C



E-Line
T092 Compatible

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	$V_{CE(sat)}$			0.7	V	$I_C = 500\text{mA}, I_B = 50\text{mA}^*$
Base-Emitter Turn On Voltage	$V_{BE(on)}$			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=300 μs . Duty cycle $\leq 2\%$