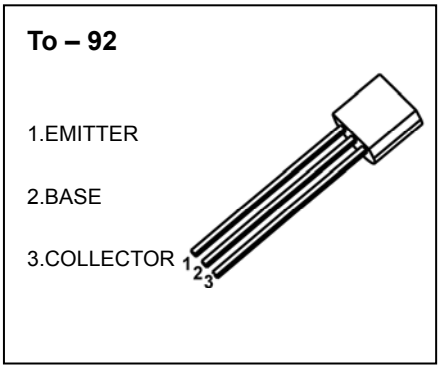
TO-92 Plastic-Encapsulate Transistors

ZTX450 TRANSISTOR (NPN)



FEATURES

- Low Breakdown Voltage
- General Purpose Amplifier Transistor

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	45	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	1	A
P_C	Collector Power Dissipation	625	mW
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	200	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA, I_E=0	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$*	I_C=10mA, I_B=0	45			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA, I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=45V, I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V, I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$*	V_{CE}=10V, I_C=150mA	100		300	
	$h_{FE(2)}$*	V_{CE}=10V, I_C=1A	15			
Collector-emitter saturation voltage	$V_{CE(sat)}$*	I_C=150mA, I_B=15mA			0.25	V
Base-emitter saturation voltage	$V_{BE(sat)}$*	I_C=150mA, I_B=15mA			1.1	V
Transition frequency	f_T	V_{CE}=10V,I_C=50mA,f=100MHz	150			MHz
Collector output capacitance	C_{ob}	V_{CB}=10V, I_C=0, f=1MHz			15	pF

*Pulse test