

KTC4372

TRANSISTOR (NPN)

FEATURES

- Small Flat Package
- High Voltage Switching Application
- High Voltage
- High Transition Frequency



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	50	mA
P_c	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	°C/W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 0.1\text{mA}, I_E = 0$	200			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}, I_B = 0$	150			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 0.1\text{mA}, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = 200\text{V}, I_E = 0$		100	nA	
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$		100	nA	
DC current gain	h_{FE}	$V_{CE} = 5\text{V}, I_C = 10\text{mA}$	70		240	
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C = 10\text{mA}, I_B = 1\text{mA}$		0.5		V
Base-emitter voltage	V_{BE}	$V_{CE} = 5\text{V}, I_C = 30\text{mA}$		1		V
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$		5		pF
Transition frequency	f_T	$V_{CE} = 30\text{V}, I_C = 10\text{mA}$		120		MHz

CLASSIFICATION OF h_{FE}

RANK	O	Y
RANGE	70 ~ 140	120 ~ 240
MARKING	AO	AY