



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92L Plastic-Encapsulate Transistors

KTC3205 TRANSISTOR (NPN)

FEATURES

Power dissipation

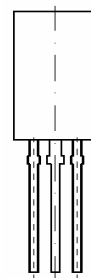
P_{CM} : 1 W ($T_a=25^{\circ}\text{C}$)

TO-92L

1. EMITTER

2. COLLECTOR

3. BASE



1 2 3

MAXIMUM RATINGS* $T_A=25^{\circ}\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	2	A
P_C	Collector Dissipation	1	W
T_J, T_{stg}	Junction and Storage Temperature	-55-150	$^{\circ}\text{C}$

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 1\text{mA}, I_E = 0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10\text{mA}, I_B = 0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 1\text{mA}, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = 30\text{V}, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$			0.1	μA
DC current gain	h_{FE}	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1.5\text{A}, I_B = 30\text{mA}$			2.0	V
Base-emitter voltage	V_{BE}	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$			1.0	V
Transition frequency	f_T	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$		120		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, E = 0\text{V}, f = 1\text{MHz}$		13		pF

CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	100-200	160-320

Typical Characteristics

KTC3205

