

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

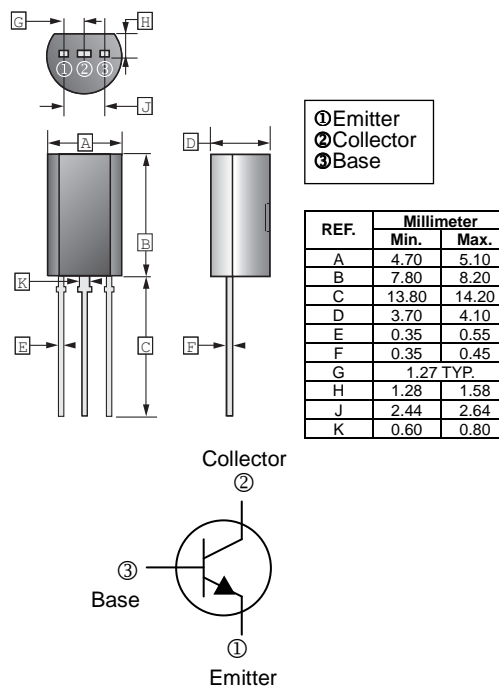
### FEATURE

- Low collector to emitter saturation voltage  $V_{CE(sat)}$ .
- Audio power amplifier
- High Current

### CLASSIFICATION OF $h_{FE}$

Product-Rank	KTC3205-O	KTC3205-Y
Range	100~200	160~320

### TO-92L



### ABSOLUTE MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	30	V
Collector to Emitter Voltage	$V_{CEO}$	30	V
Emitter to Base Voltage	$V_{EBO}$	5	V
Continuous Collector Current	$I_C$	2	A
Collector Power Dissipation	$P_C$	1	W
Junction, Storage Temperature	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	30	-	-	V	$I_C=1\text{mA}, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	30	-	-	V	$I_C=10\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	$I_E=1\text{mA}, I_C=0$
Collector Cut - Off Current	$I_{CBO}$	-	-	0.1	$\mu\text{A}$	$V_{CB}=30\text{V}, I_E=0$
Emitter cut-off current	$I_{EBO}$	-	-	0.1	$\mu\text{A}$	$V_{EB}=5\text{V}, I_C=0$
DC Current Gain	$h_{FE}$	100	-	320		$V_{CE}=2\text{V}, I_C=500\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	2	V	$I_C=1.5\text{A}, I_B=30\text{mA}$
Base - Emitter Voltage	$V_{BE}$	-	-	1	V	$V_{CE}=2\text{V}, I_C=500\text{mA}$
Transition Frequency	$f_T$	-	120	-	MHz	$V_{CE}=2\text{V}, I_C=500\text{mA}$
Collector Output Capacitance	$C_{ob}$	-	13	-	pF	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$