

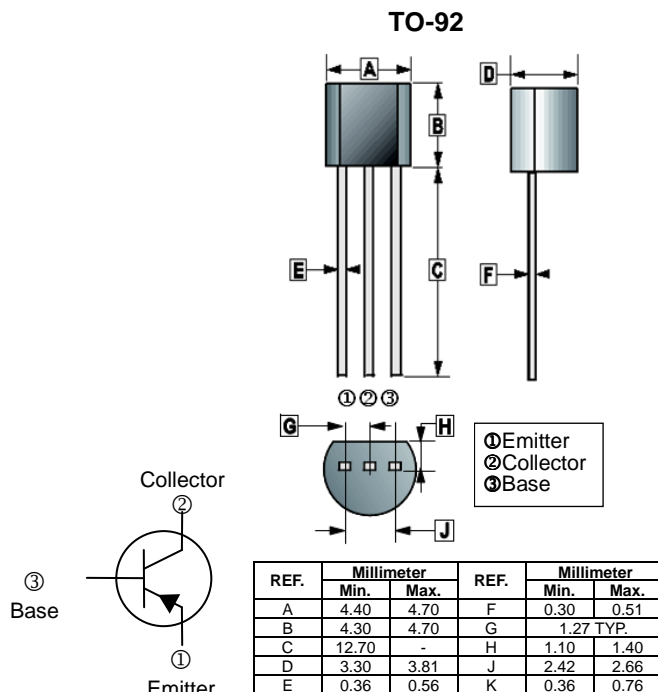
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURE

- General Purpose Application Switching Application

## CLASSIFICATION OF $h_{FE}$

Product-Rank		KTA1270-O	KTA1270-Y
Range	$h_{FE(1)}$	70~140	120~240
	$h_{FE(2)}$	25(min)	40(min)



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

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	$V_{CB0}$	-35	V
Collector to Emitter Voltage	$V_{CEO}$	-30	V
Emitter to Base Voltage	$V_{EBO}$	-5	V
Collector Current - Continuous	$I_C$	-500	mA
Collector Power Dissipation	$P_C$	500	mW
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	$V_{(BR)CB0}$	-35	-	-	V	$I_C = -100\mu\text{A}, I_E = 0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	-30	-	-	V	$I_C = -1\text{mA}, I_B = 0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E = -100\mu\text{A}, I_C = 0$
Collector Cut-Off Current	$I_{CBO}$	-	-	-0.1	$\mu\text{A}$	$V_{CB} = -35\text{V}, I_E = 0$
Emitter Cut-Off Current	$I_{EBO}$	-	-	-0.1	$\mu\text{A}$	$V_{EB} = -5\text{V}, I_C = 0$
DC Current Gain	$h_{FE(1)}$	70	-	240		$V_{CE} = -1\text{V}, I_C = -100\text{mA}$
	$h_{FE(2)}$	25	-	-		$V_{CE} = -6\text{V}, I_C = -400\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.25	V	$I_C = -100\text{mA}, I_B = -10\text{mA}$
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	-1	V	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$
Transition Frequency	$f_T$	-	200	-	MHz	$V_{CE} = -6\text{V}, I_C = -20\text{mA}, f = 100\text{MHz}$
Collector Output Capacitance	$C_{ob}$	-	13	-	pF	$V_{CB} = -6\text{V}, I_E = 0, f = 1\text{MHz}$