

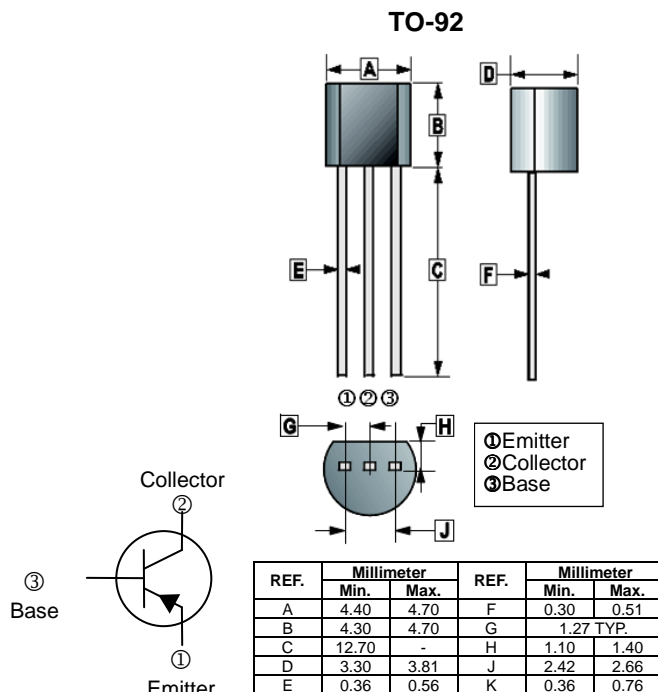
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

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	μA	$V_{CB} = -35\text{V}, I_E = 0$
Emitter Cut-Off Current	I_{EBO}	-	-	-0.1	μA	$V_{EB} = -5\text{V}, I_C = 0$
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	$V_{CB} = -6\text{V}, I_E = 0, f = 1\text{MHz}$