

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

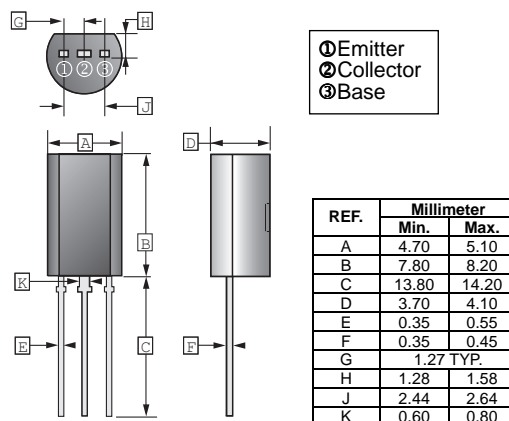
## FEATURE

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

## CLASSIFICATION OF $h_{FE}$

Product-Rank	KSC2383L-R	KSC2383L-O	KSC2383L-Y
Range	60~120	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	$V_{CBO}$	160	V
Collector to Emitter Voltage	$V_{CEO}$	160	V
Emitter to Base Voltage	$V_{EBO}$	6	V
Continuous Collector Current	$I_C$	1	A
Collector Power Dissipation	$P_C$	0.75	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	$V_{(BR)CBO}$	160	-	-	V	$I_C=100\mu\text{A}, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	160	-	-	V	$I_C=10\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	6	-	-	V	$I_E=10\mu\text{A}, I_C=0$
Collector Cut - Off Current	$I_{CBO}$	-	-	1	$\mu\text{A}$	$V_{CB}=150\text{V}, I_E=0$
Collector Cut - Off Current	$I_{CER}$	-	-	10	$\mu\text{A}$	$V_{CB}=150\text{V}, R_{EB}=10\text{M}\Omega$
Emitter cut-off current	$I_{EBO}$	-	-	1	$\mu\text{A}$	$V_{EB}=6\text{V}, I_C=0$
DC Current Gain	$h_{FE}$	60	-	320		$V_{CE}=5\text{V}, I_C=200\text{mA}$
		40	-	-		$V_{CE}=5\text{V}, I_C=10\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	1	V	$I_C=500\text{mA}, I_B=50\text{mA}$
Base - Emitter Voltage	$V_{BE}$	-	-	0.75	V	$V_{CE}=5\text{V}, I_C=5\text{mA}$
Transition Frequency	$f_T$	-	20	-	MHz	$V_{CE}=5\text{V}, I_C=200\text{mA}$

**CHARACTERISTIC CURVES**

