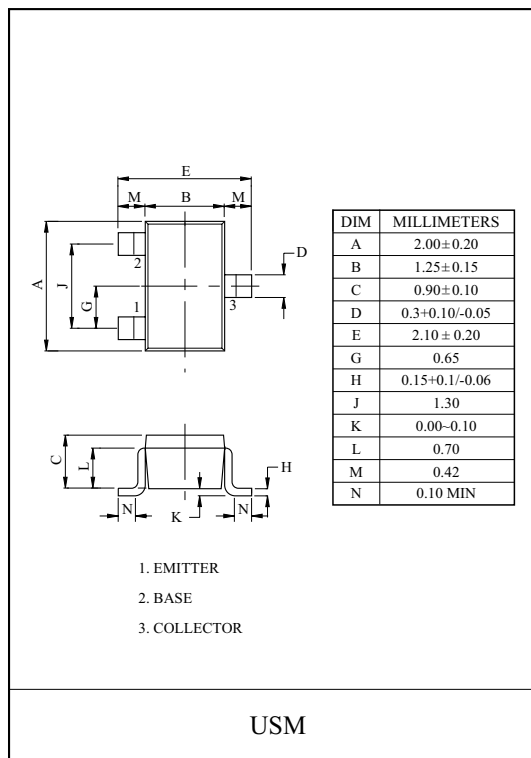
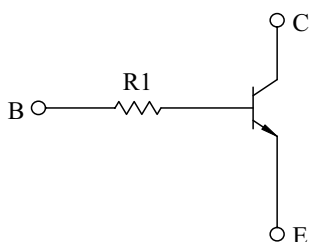


SWITCHING APPLICATION.  
AUDIO MUTING APPLICATION.

#### FEATURES

- High emitter-base voltage :  $V_{EBO}=25V(\text{Min})$
- High reverse  $h_{FE}$  : reverse  $h_{FE}=150(\text{Typ.})$  ( $V_{CE}=-2V, I_C=-4mA$ )
- Low on resistance :  $R_{on}=1 \Omega$  (Typ.) ( $I_B=5mA$ )
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

#### EQUIVALENT CIRCUIT



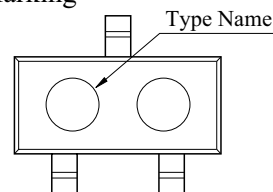
#### MAXIMUM RATING ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	50	V
Collector-Emitter Voltage	$V_{CEO}$	20	V
Emitter-Base Voltage	$V_{EBO}$	25	V
Collector Current	$I_C$	300	mA
Collector Power Dissipation	$P_C$	100	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ\text{C}$

#### MARK SPEC

TYPE	KRC281U	KRC282U	KRC283U	KRC284U	KRC285U	KRC286U
MARK	MQ	MR	MS	MT	MU	MV

#### Marking



# KRC281U~KRC286U

## ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage		$BV_{CEO}$	$I_C=1mA$	20	-	-	V
Collector-Base Breakdown Voltage		$BV_{CBO}$	$I_C=50\mu A$	50	-	-	V
Emitter-Base Breakdown Voltage		$BV_{EBO}$	$I_E=50\mu A$	25	-	-	V
Collector Cut-off Current		$I_{CBO}$	$V_{CB}=50V, I_E=0$	-	-	0.1	$\mu A$
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=30mA, I_B=3mA$	-	-	0.1	V
DC Current Gain		$h_{FE}$	$V_{CE}=2V, I_C=4mA$	350	-	1200	
Input Resistor	KRC281U	$R_i$		-	2.2	-	k $\Omega$
	KRC282U			-	4.7	-	
	KRC283U			-	5.6	-	
	KRC284U			-	6.8	-	
	KRC285U			-	10	-	
	KRC286U			-	22	-	
Transition Frequency		$f_T^*$	$V_{CE}=6V, I_C=4mA,$	-	30	-	MHz
Collector Output Capacitance		$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	4.8	-	pF

\* Characteristic of Transistor Only.

Note)  $h_{FE}$  Classification B:350~1200