KRC281S~KRC286S

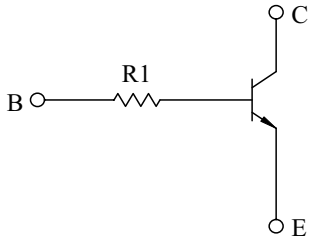
EPITAXIAL PLANAR NPN TRANSISTOR

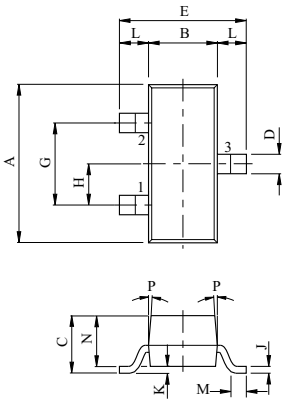
SWITCHING APPLICATION.
AUDIO MUTING APPLICATION.

FEATURES

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

EQUIVALENT CIRCUIT





DIM	MILLIMETERS
A	2.93±0.20
B	1.30+0.20/-0.15
C	1.30 MAX
D	0.45+0.15/-0.05
E	2.40+0.30/-0.20
G	1.90
H	0.95
J	0.13+0.10/-0.05
K	0.00 ~ 0.10
L	0.55
M	0.20 MIN
N	1.00+0.20/-0.10
P	7 °

1. EMITTER
2. BASE
3. COLLECTOR

SOT-23

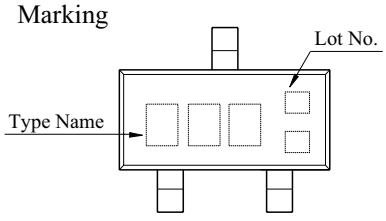
MAXIMUM RATING (Ta=25℃)

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	150	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 ~ 150	℃

MARK SPEC

TYPE	h_{FE} classification
	B
KRC281S	MQB
KRC282S	MRB
KRC283S	MSB
KRC284S	MTB
KRC285S	MUB
KRC286S	MVB

Marking



ELECTRICAL CHARACTERISTICS (Ta=25℃)

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=50μA	50	-	-	V
Emitter-Base Breakdown Voltage		BV_{EBO}	I_E=50μA	25	-	-	V
Collector Cut-off Current		I_{CBO}	V_{CB}=50V, I_E=0	-	-	0.1	μA
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	KRC281S	R_1		-	2.2	-	kΩ
	KRC282S			-	4.7	-	
	KRC283S			-	5.6	-	
	KRC284S			-	6.8	-	
	KRC285S			-	10	-	
	KRC286S			-	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