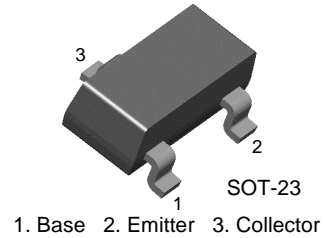


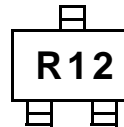
KSR1112

Switching Application (Bias Resistor Built In)

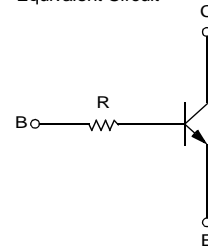
- Switching circuit, Inverter, Interface circuit, Driver Circuit
- Built in bias Resistor (R=47KΩ)
- Complement to KSR2112



Marking



Equivalent Circuit



NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

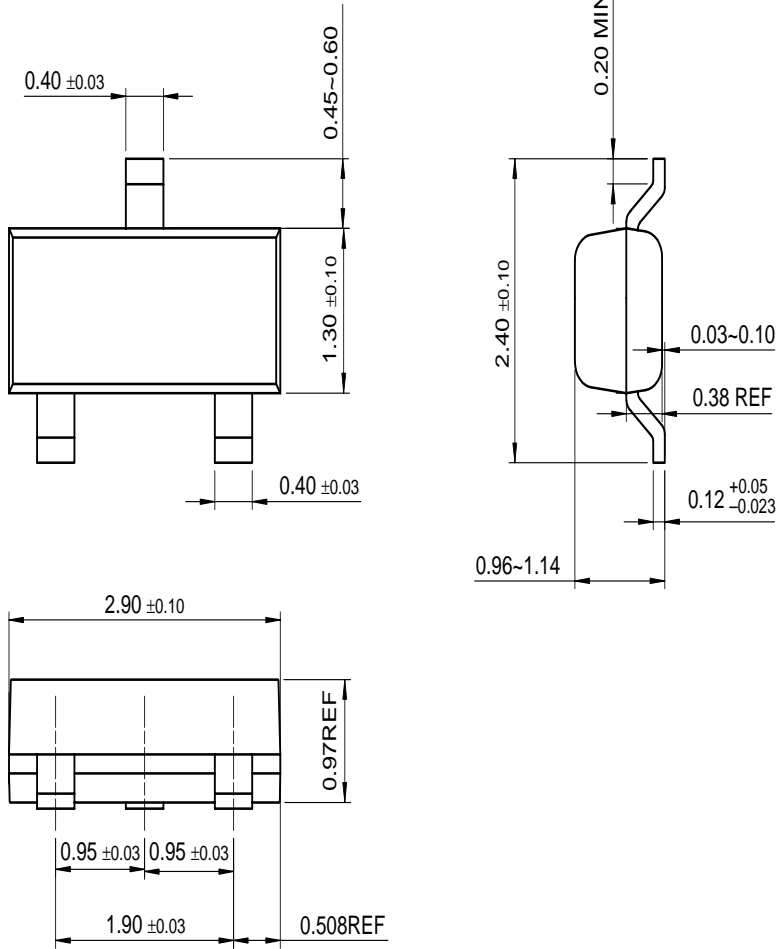
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	40	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	100	mA
P_C	Collector Power Dissipation	200	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C=100\mu\text{A}, I_E=0$	40			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_E=1\text{mA}, I_B=0$	40			V
I_{CBO}	Collector Cut-off Current	$V_{CB}=30\text{V}, I_E=0$			0.1	μA
h_{FE}	DC Current Gain	$V_{CE}=5\text{V}, I_C=1\text{mA}$	100		600	
$V_{CE}(\text{sat})$	Collector-Emitter Saturation Voltage	$I_C=10\text{mA}, I_B=1\text{mA}$			0.3	V
C_{ob}	Output Capacitance	$V_{CB}=10\text{V}, I_E=0$ $f=1\text{MHz}$		3.7		pF
f_T	Current Gain Bandwidth Product	$V_{CE}=10\text{V}, I_C=5\text{mA}$		250		MHz
R	Input Resistor		32	47	62	KΩ

Package Dimensions

SOT-23



Dimensions in Millimeters

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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
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KSR1112

NPN Epitaxial Silicon Transistor

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Features

Switching Application (Bias Resister Built In)

- Switchng circuit, Inverter, Interface circuit, Driver Circuit
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Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
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