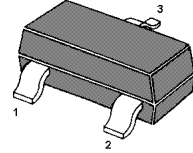
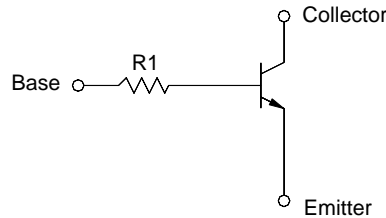


**NPN Silicon Epitaxial Planar Transistor**

for switching and interface circuit and drive circuit applications

Features

- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process



1. Base 2. Emitter 3. Collector
SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V _{CBO}	50	V
Collector Emitter Voltage	V _{CEO}	50	V
Emitter Base Voltage	V _{EBO}	5	V
Collector Current	I _C	100	mA
Power Dissipation	P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{Stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at V _{CE} = 5 V, I _C = 1 mA	h _{FE}	120	-	-	-
Collector Cutoff Current at V _{CB} = 50 V	I _{CBO}	-	-	100	nA
Emitter Cutoff Current at V _{EB} = 5 V	I _{EBO}	-	-	100	nA
Collector Emitter Saturation Voltage at I _C = 10 mA, I _B = 0.5 mA	V _{CE(sat)}	-	-	0.3	V
Transition Frequency at V _{CE} = 10 V, I _C = 5 mA	f _T	-	250	-	MHz
Input Resistor	R ₁	-	4.7	-	KΩ
	MMBTRC110SS	-	10	-	
	MMBTRC111SS	-	100	-	
	MMBTRC112SS	-	22	-	
	MMBTRC113SS	-	47	-	