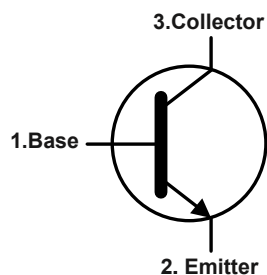


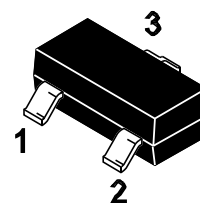
Features

- For Switching and AF Amplifier Applications.

Equivalent Circuit



SOT-23



1.Base 2.Emitter 3.Collector

Marking Code:

MMBTSC3356Q : J4Q

MMBTSC3356R : J4R

MMBTSC3356S : J4S

Absolute Maximum Ratings

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CB0}	20	V
Collector Emitter Voltage	V_{CEO}	12	V
Emitter Base Voltage	V_{EBO}	3	V
Collector Current	I_C	100	mA
Maximum Power Dissipation	P_D	200	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

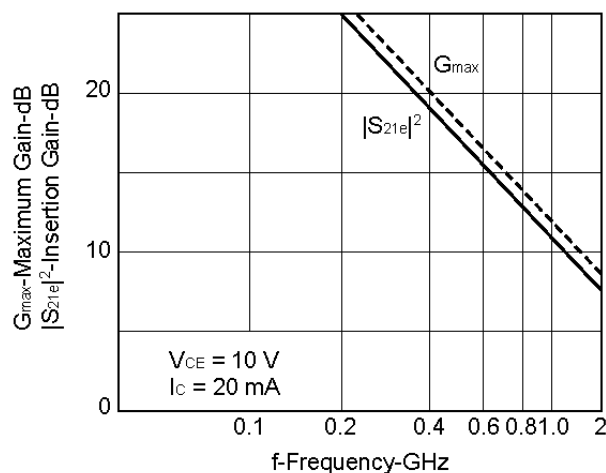
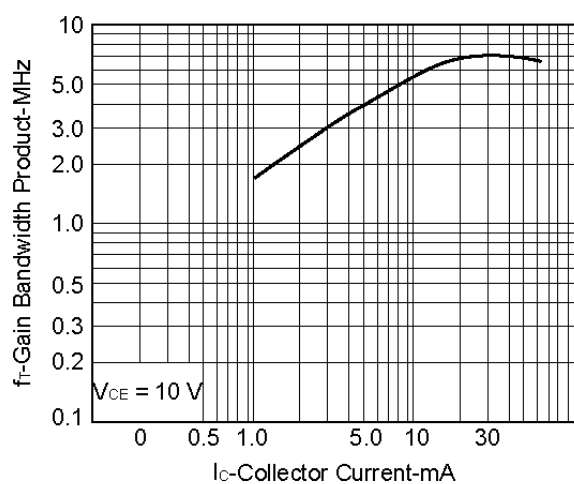
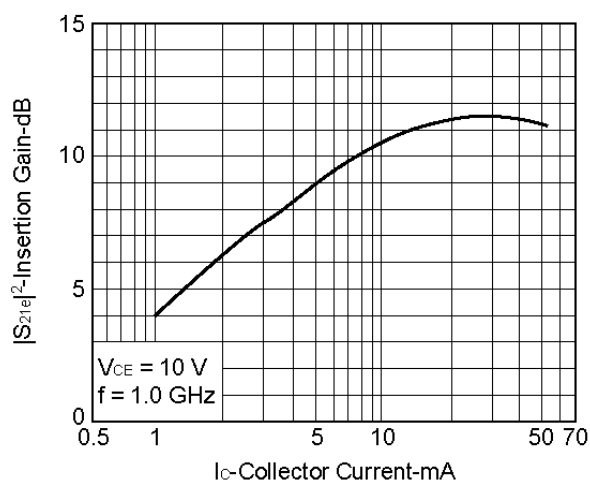
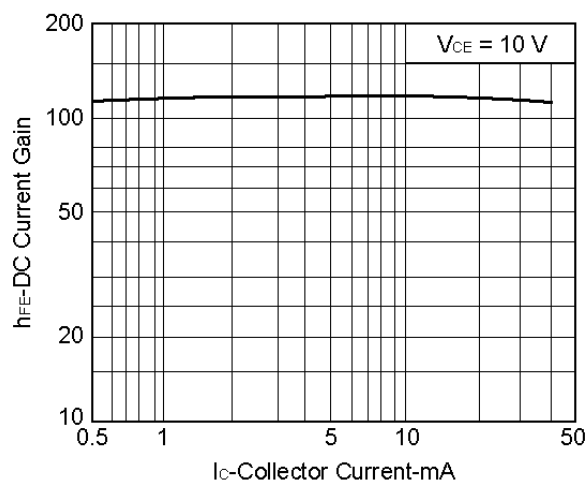
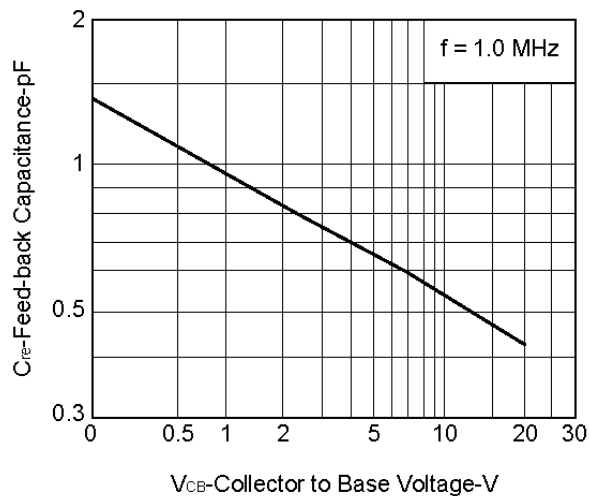
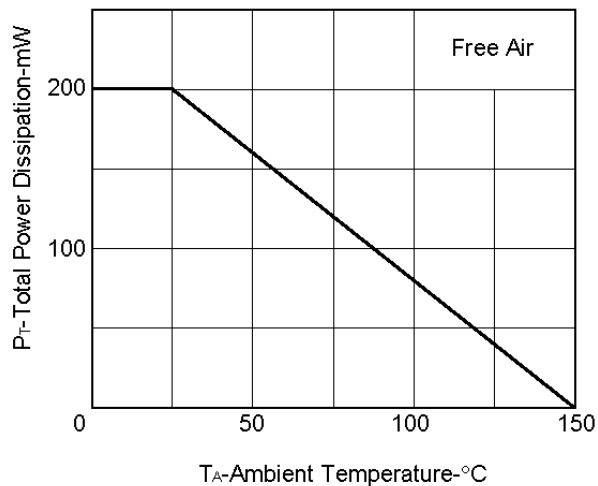


Electrical Characteristics (T_A=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at V _{CE} = 10 V, I _C = 20 mA	H _{FE}	50	--	100	--
Gain Group		80	--	160	
		125	--	250	
Collector Base Cutoff Current at V _{CB} = 10V	I _{CBO}	--	--	1	μA
Emitter Base Cutoff Current at V _{EB} = 1 V	I _{EBO}	--	--	1	μA
Collector Base Breakdown Voltage at I _C = 10 μA	V _{(BR)CBO}	20	--	--	V
Collector Emitter Breakdown Voltage at I _C = 1 mA	V _{(BR)CEO}	12	--	--	V
Emitter Base Breakdown Voltage at I _E = 10 μA	V _{(BR)EBO}	3	--	--	V
Collector Emitter Saturation Voltage at I _C = 10 mA, I _B = 5 mA	V _{CE(sat)}	--	--	0.5	V
Transition Frequency at V _{CE} = 10 V, I _C = 20 mA	F _T	--	7	--	GHZ
Feed-Back Capacitance at V _{CB} = 10 V, f = 1 MHz	C _{re} ^{Note1}	--	--	1	pF

Note1: The emitter terminal and the case shall be connected to the guard terminal of the three-terminal capacitance bridge.

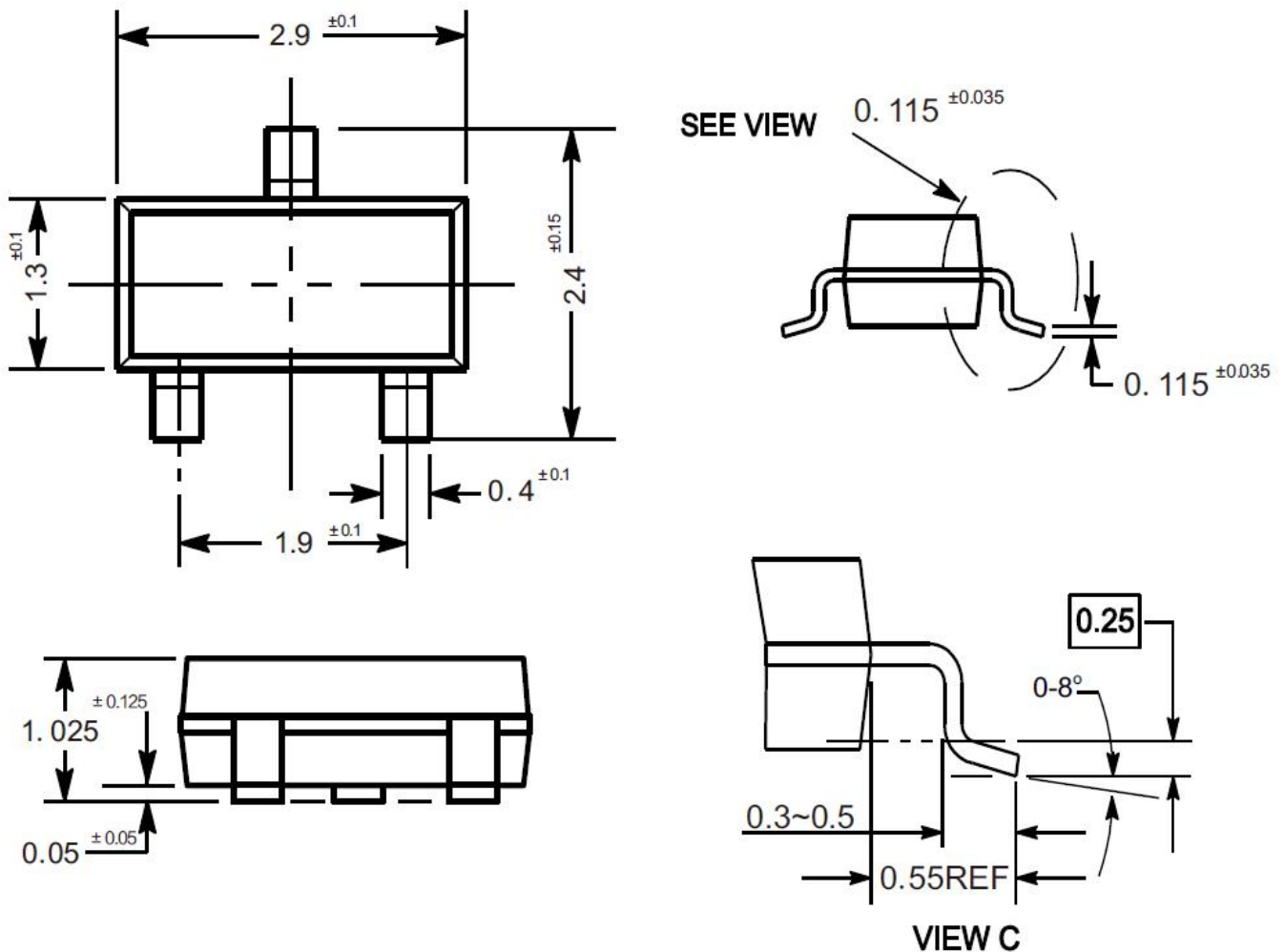
Typical Characteristic Curves



Package Outline

SOT-23

Dimensions in mm

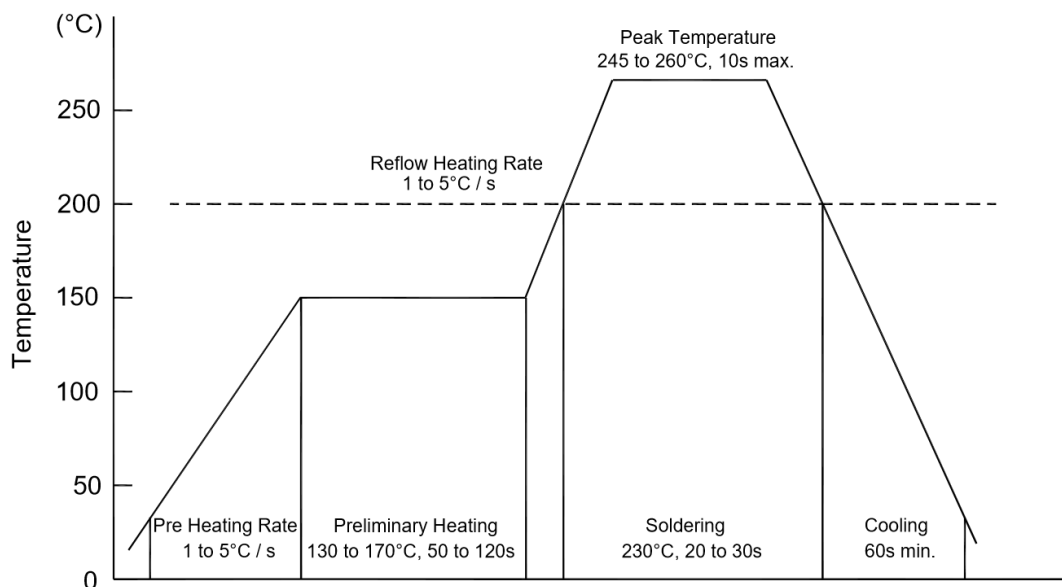


Ordering Information

Device	Package	Shipping
MMBTSC3356	SOT-23	3,000PCS/Reel&7inches

Conditions of Soldering and Storage

◆ Recommended condition of reflow soldering



Recommended peak temperature is over 245 °C. If peak temperature is below 245 °C, you may adjust the following parameters:

- Time length of peak temperature (longer)
- Time length of soldering (longer)
- Thickness of solder paste (thicker)

◆ Conditions of hand soldering

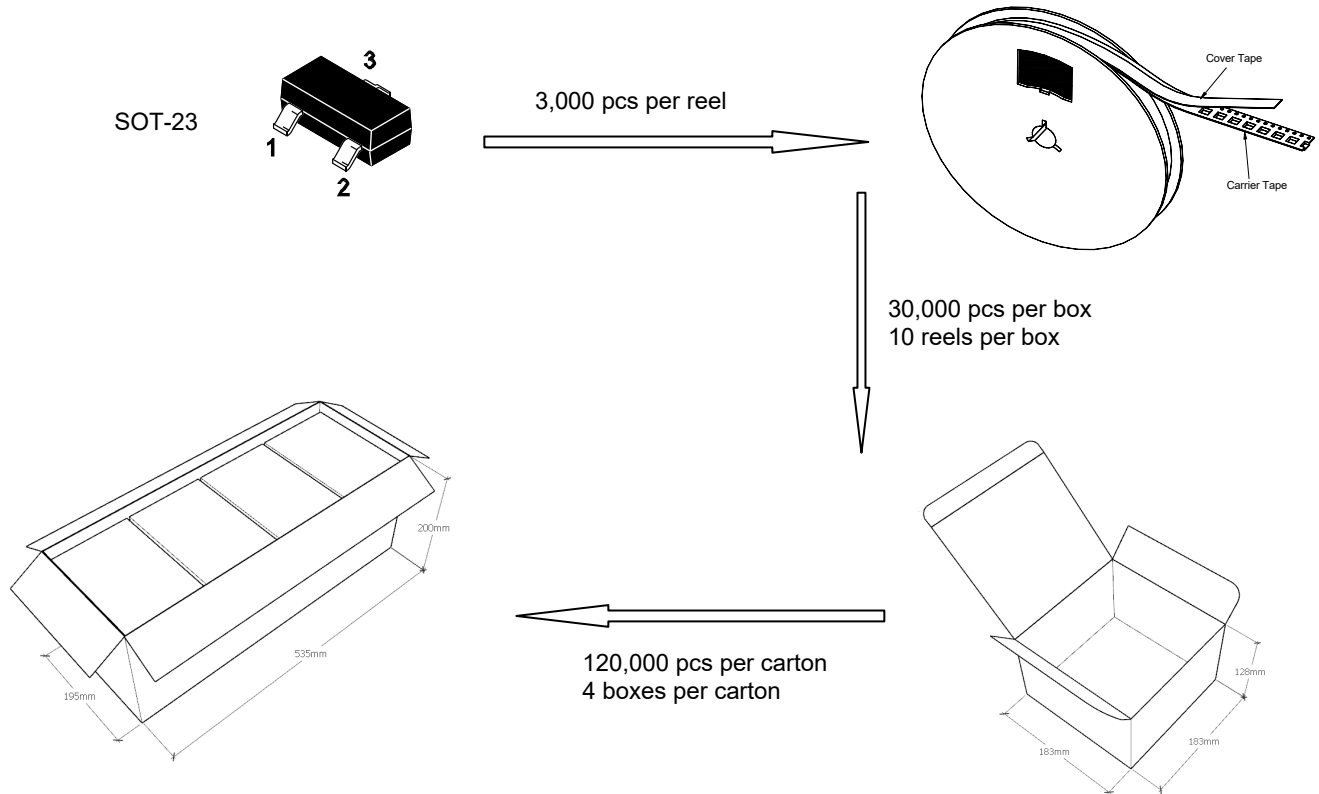
- Temperature: 370 °C
- Time: 3s max.
- Times: one time

◆ Storage conditions

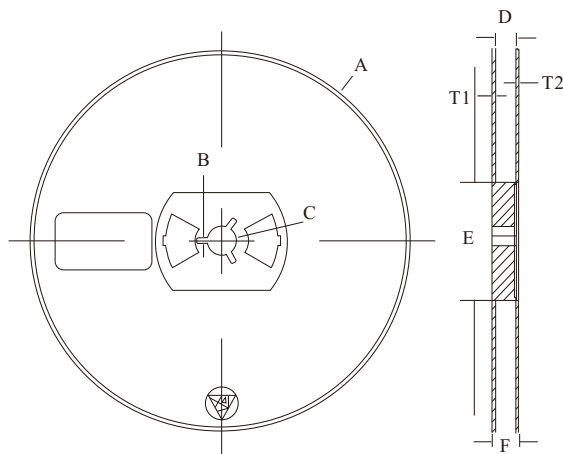
- **Temperature**
5 to 40 °C
- **Humidity**
30 to 80% RH
- **Recommended period**
One year after manufacturing

Package Specifications

- The method of packaging



◆ Embossed tape and reel data



Reel (7")

