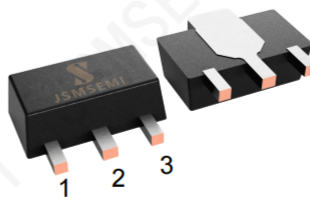
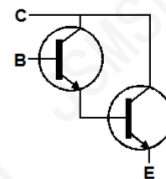


### Features

- High Collector Current
- High Current Gain
- RoHS and Reach Compliant
- Halogen and Antimony Free



1.Base 2.Collector 3.Emitter



Equivalent Circuit

### Absolute Maximum Ratings

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	80	V
Collector Emitter Voltage	$V_{CEO}$	60	V
Emitter Base Voltage	$V_{EBO}$	10	V
Collector Current	$I_C$	0.5	A
Maximum Power Dissipation	$P_D$	1.1	W
Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C

### Ordering Information

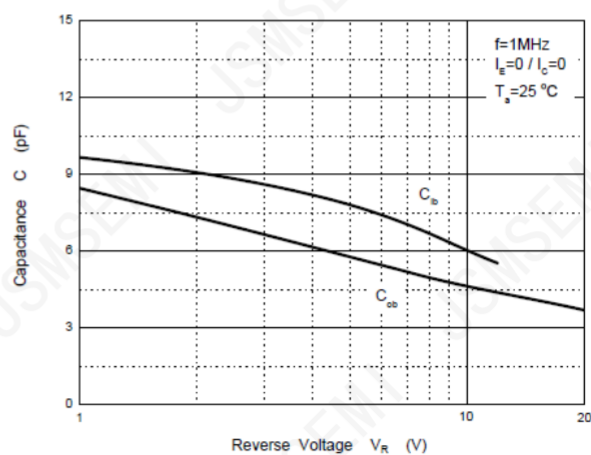
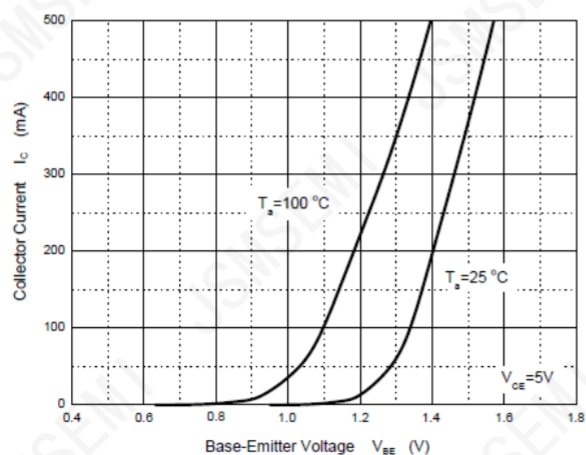
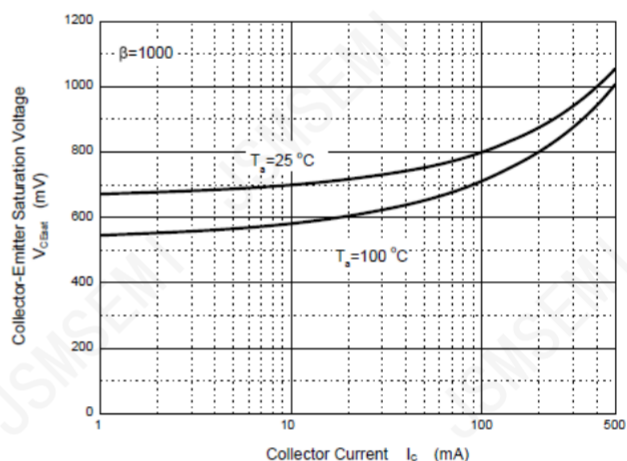
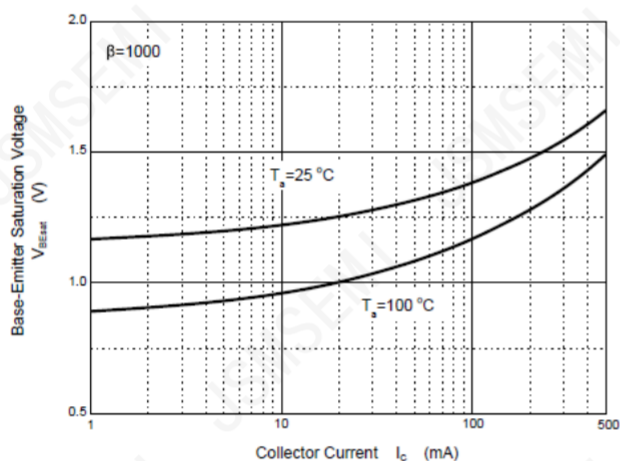
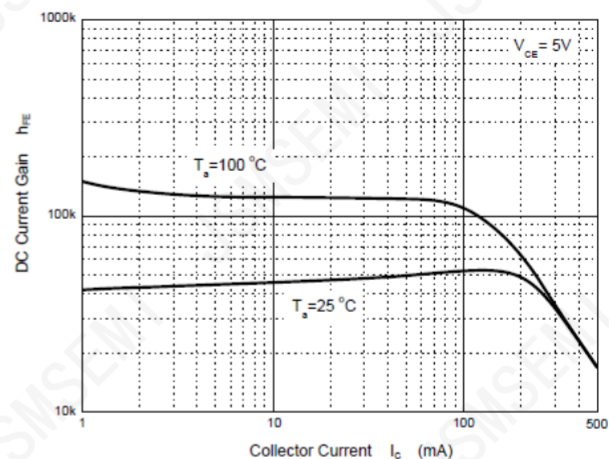
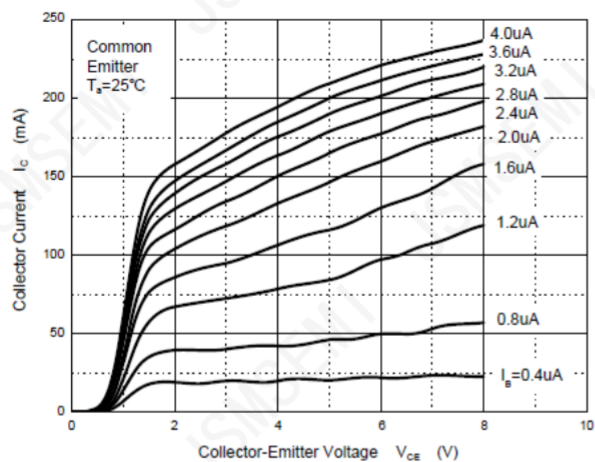
Order number	Package	Operation Temperature Range	MSL Grade	Ship, Quantity	Green
BCV49,115-JSM	SOT-89	-55 to +150°C	3	T&R, 1000	RoHS

## Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

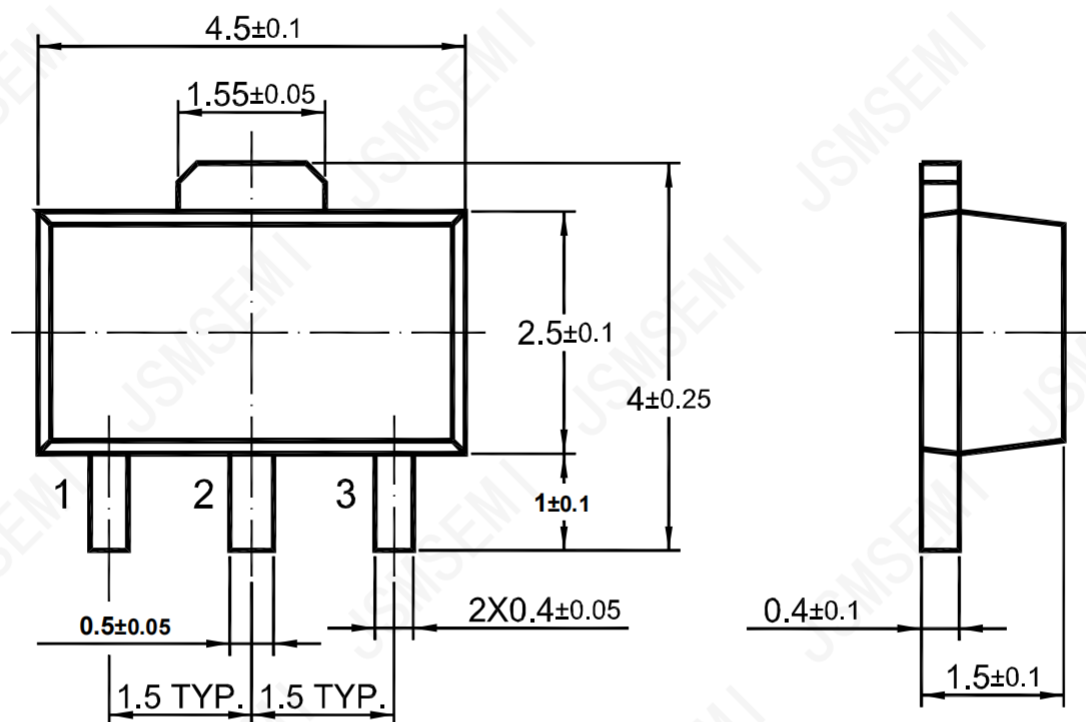
Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 5\text{ V}$ , $I_C = 1\text{ mA}$ at $V_{CE} = 5\text{ V}$ , $I_C = 10\text{ mA}$ at $V_{CE} = 5\text{ V}$ , $I_C = 100\text{ mA}$	$H_{FE}$	2000 4000 10000	-- -- --	-- -- --	--
Collector Base Cutoff Current at $V_{CB} = 60\text{ V}$	$I_{CBO}$	--	--	100	nA
Emitter Base Cutoff Current at $V_{EB} = 10\text{ V}$	$I_{EBO}$	--	--	100	nA
Collector Base Breakdown Voltage at $I_C = 100\text{ }\mu\text{A}$	$V_{(BR)CBO}$	80	--	--	V
Collector Emitter Breakdown Voltage at $I_C = 10\text{ mA}$	$V_{(BR)CEO}$	60	--	--	V
Emitter Base Breakdown Voltage at $I_E = 10\text{ }\mu\text{A}$	$V_{(BR)EBO}$	10	--	--	V
Collector Emitter Saturation Voltage at $I_C = 100\text{ mA}$ , $I_B = 0.1\text{ mA}$	$V_{CE(sat)}$	--	--	1	V
Base Emitter Saturation Voltage at $I_C = 100\text{ mA}$ , $I_B = 0.1\text{ mA}$	$V_{BE(sat)}$	--	--	1.5	V
Base Emitter On Voltage at $V_{CE} = 5\text{ V}$ , $I_C = 10\text{ mA}$	$V_{BE(on)}$	--	--	1.4	V
Transition Frequency at $V_{CE} = 5\text{ V}$ , $I_C = 30\text{ mA}$ , $f = 100\text{ MHz}$	$f_T$	--	220	--	MHz

## Typical Characteristic Curves



## Package Outline

SOT-89



Dimensions in mm

## Revision History

Rev.	Change	Date
V1.0	Initial version	6/27/2021

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