

# DSC9A01

## Silicon NPN epitaxial planar type

For low frequency amplification  
DSC5A01 in SSMini3 type package

### ■ Features

- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

### ■ Packaging

Embossed type (Thermo-compression sealing): 3000 pcs / reel (standard)

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	$V_{\text{CBO}}$	50	V
Collector-emitter voltage (Base open)	$V_{\text{CEO}}$	40	V
Emitter-base voltage (Collector open)	$V_{\text{EBO}}$	15	V
Collector current	$I_{\text{C}}$	50	mA
Peak collector current	$I_{\text{CP}}$	100	mA
Collector power dissipation	$P_{\text{C}}$	125	mW
Junction temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +150	$^\circ\text{C}$

### ■ Package

- Code  
SSMini3-F3-B
- Pin Name
  1. Base
  2. Emitter
  3. Collector

### ■ Marking Symbol: C8

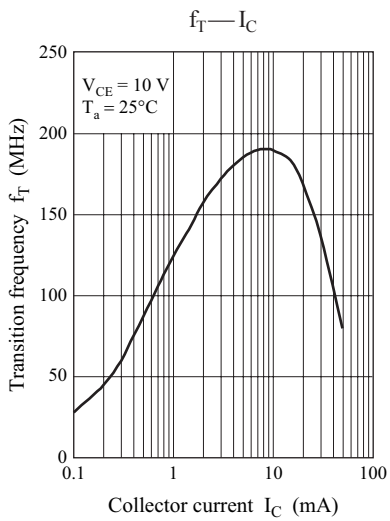
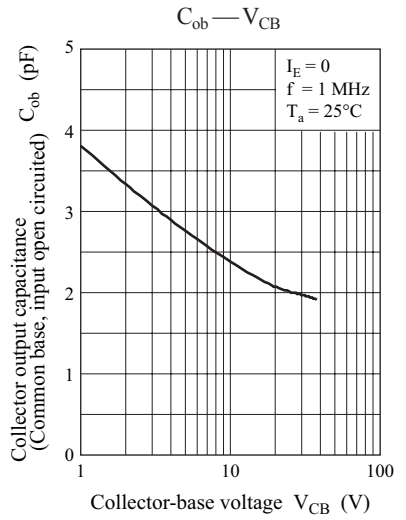
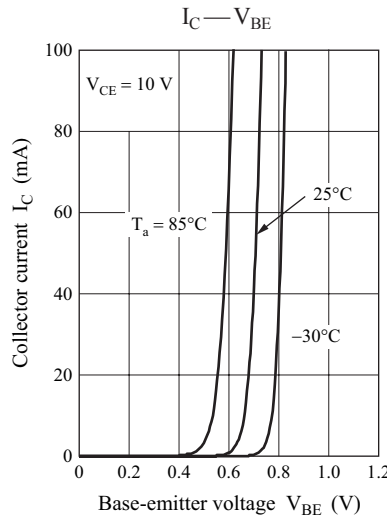
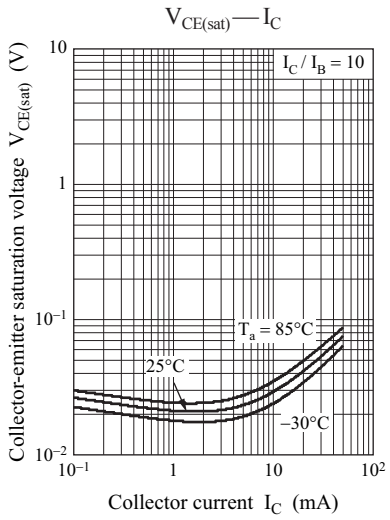
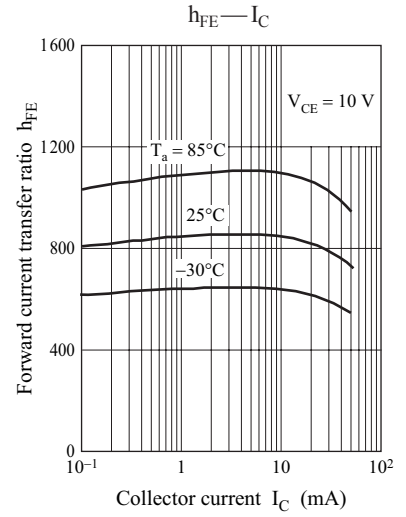
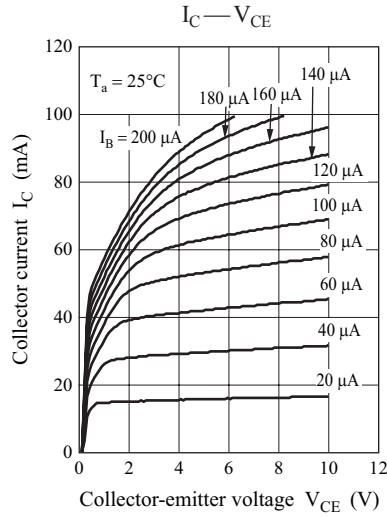
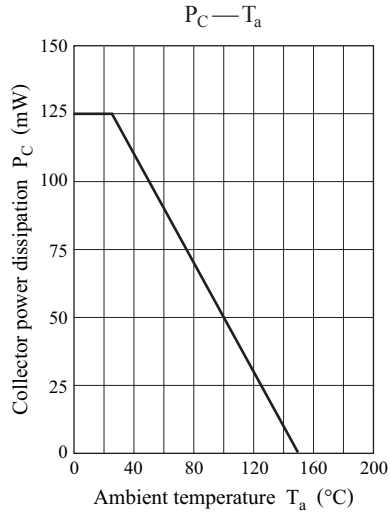
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	$V_{\text{CBO}}$	$I_{\text{C}} = 10 \mu\text{A}, I_{\text{E}} = 0$	50			V
Collector-emitter voltage (Base open)	$V_{\text{CEO}}$	$I_{\text{C}} = 1 \text{ mA}, I_{\text{B}} = 0$	40			V
Emitter-base voltage (Collector open)	$V_{\text{EBO}}$	$I_{\text{E}} = 10 \mu\text{A}, I_{\text{C}} = 0$	15			V
Collector-base cutoff current (Emitter open)	$I_{\text{CBO}}$	$V_{\text{CB}} = 20 \text{ V}, I_{\text{E}} = 0$			0.1	$\mu\text{A}$
Collector-emitter cutoff current (Base open)	$I_{\text{CEO}}$	$V_{\text{CE}} = 20 \text{ V}, I_{\text{B}} = 0$			1	$\mu\text{A}$
Forward current transfer ratio *	$h_{\text{FE}}$	$V_{\text{CE}} = 10 \text{ V}, I_{\text{C}} = 2 \text{ mA}$	400		2000	—
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}} = 10 \text{ mA}, I_{\text{B}} = 1 \text{ mA}$		0.05	0.20	V
Transition frequency	$f_{\text{T}}$	$V_{\text{CE}} = 10 \text{ V}, I_{\text{C}} = 2 \text{ mA}$		150		MHz

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

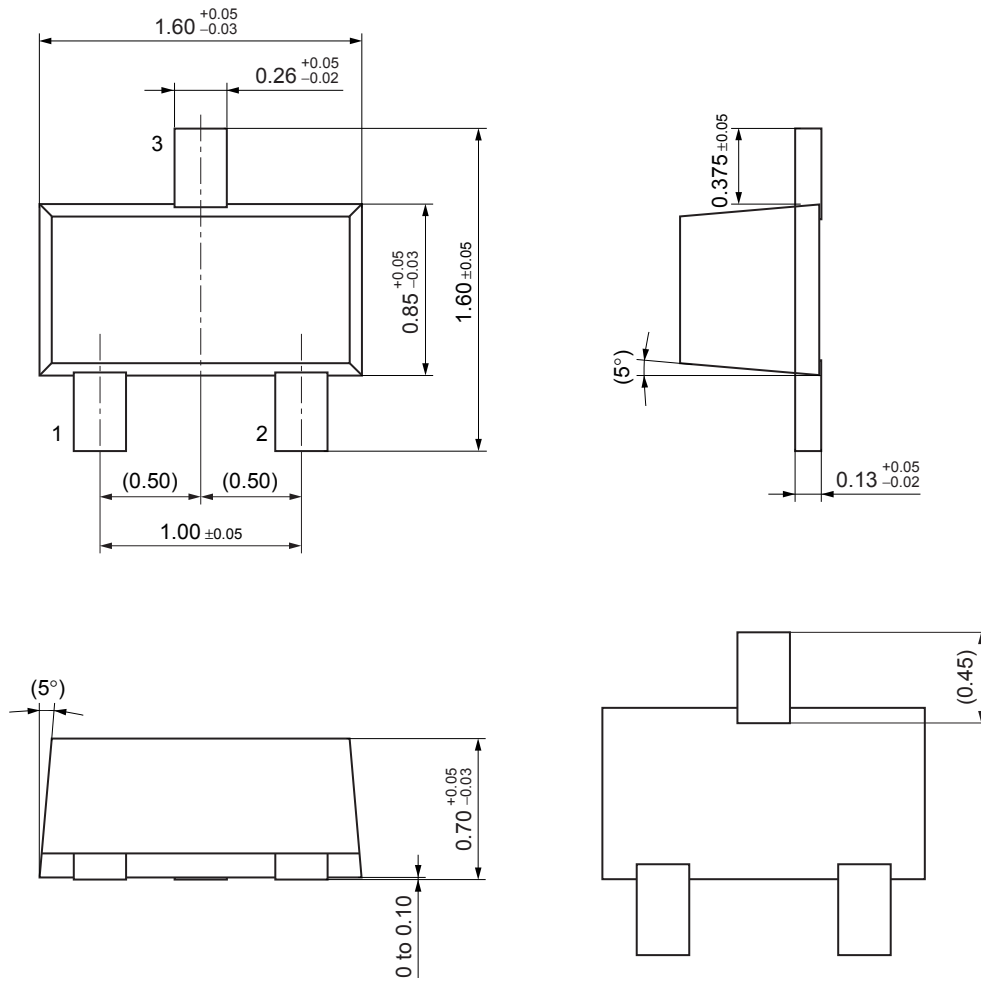
2. \*: Rank classification

Code	R	S	T
Rank	R	S	T
$h_{\text{FE}}$	400 to 800	600 to 1200	1000 to 2000
Marking Symbol	C8R	C8S	C8T



SSMini3-F3-B

Unit: mm



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