

# DMC90401

## Silicon NPN epitaxial planar type

For general amplification

### ■ Features

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

### ■ Basic Part Number

Double DSC2001 (Individual)

### ■ Packaging

Embossed type (Thermo-compression sealing): 8000 pcs / reel (standard)

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

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	$V_{\text{CBO}}$	60	V
Collector-emitter voltage (Base open)	$V_{\text{CEO}}$	50	V
Emitter-base voltage (Collector open)	$V_{\text{EBO}}$	7	V
Collector current	$I_{\text{C}}$	100	mA
Peak collector current	$I_{\text{CP}}$	200	mA
Total power dissipation	$P_{\text{T}}$	125	mW
Junction temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +150	$^\circ\text{C}$

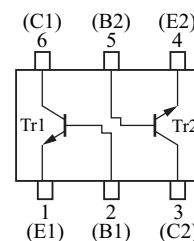
### ■ Package

- Code  
SSMini6-F3-B
- Pin Name
 

1: Emitter (Tr1)	4: Emitter (Tr2)
2: Base (Tr1)	5: Base (Tr2)
3: Collector (Tr2)	6: Collector (Tr1)

### ■ Marking Symbol: A8

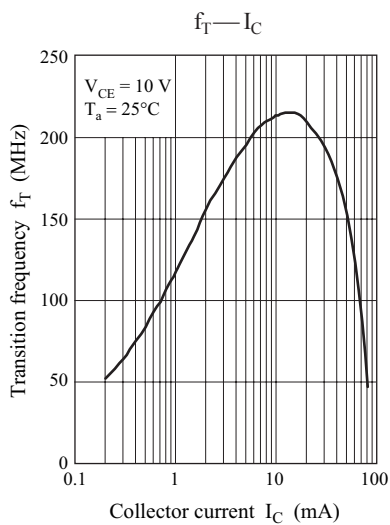
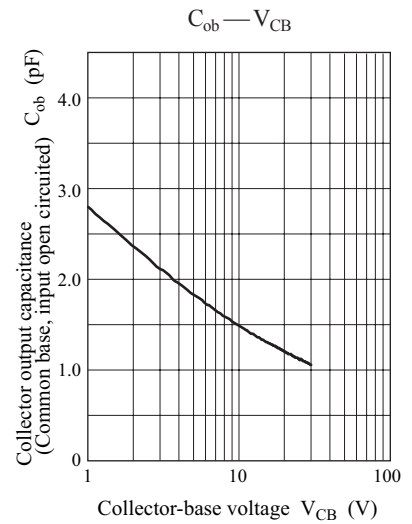
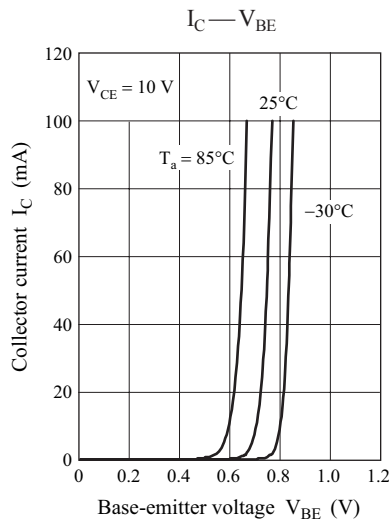
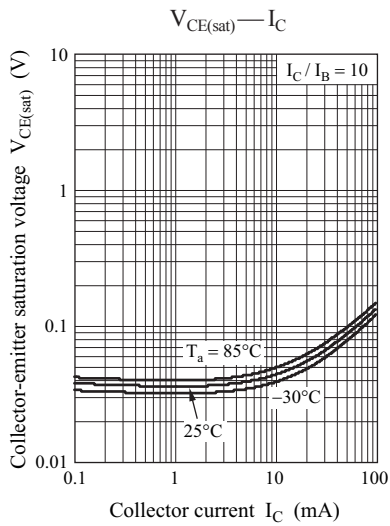
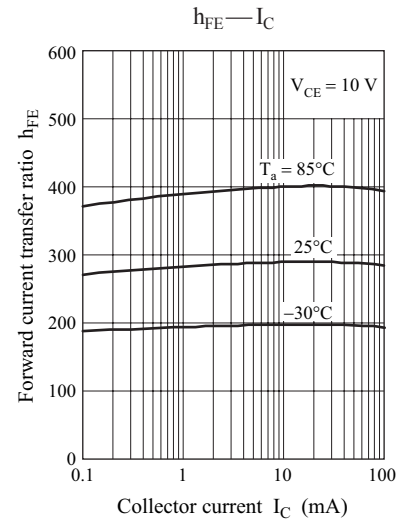
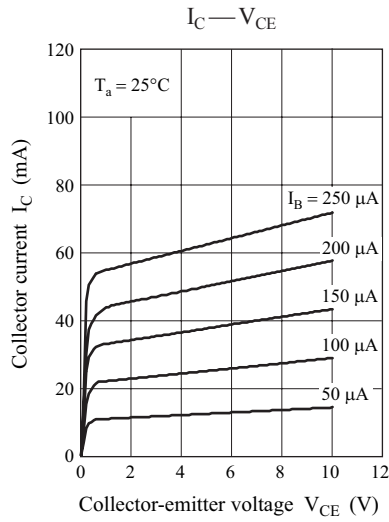
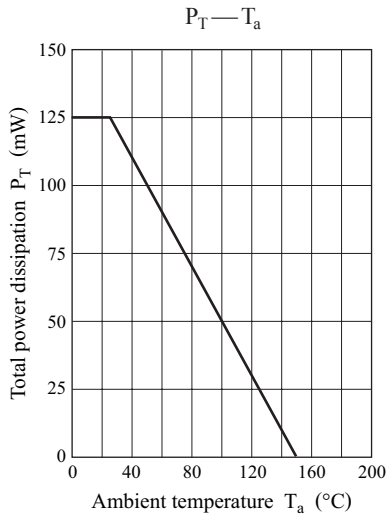
### ■ Internal Connection



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

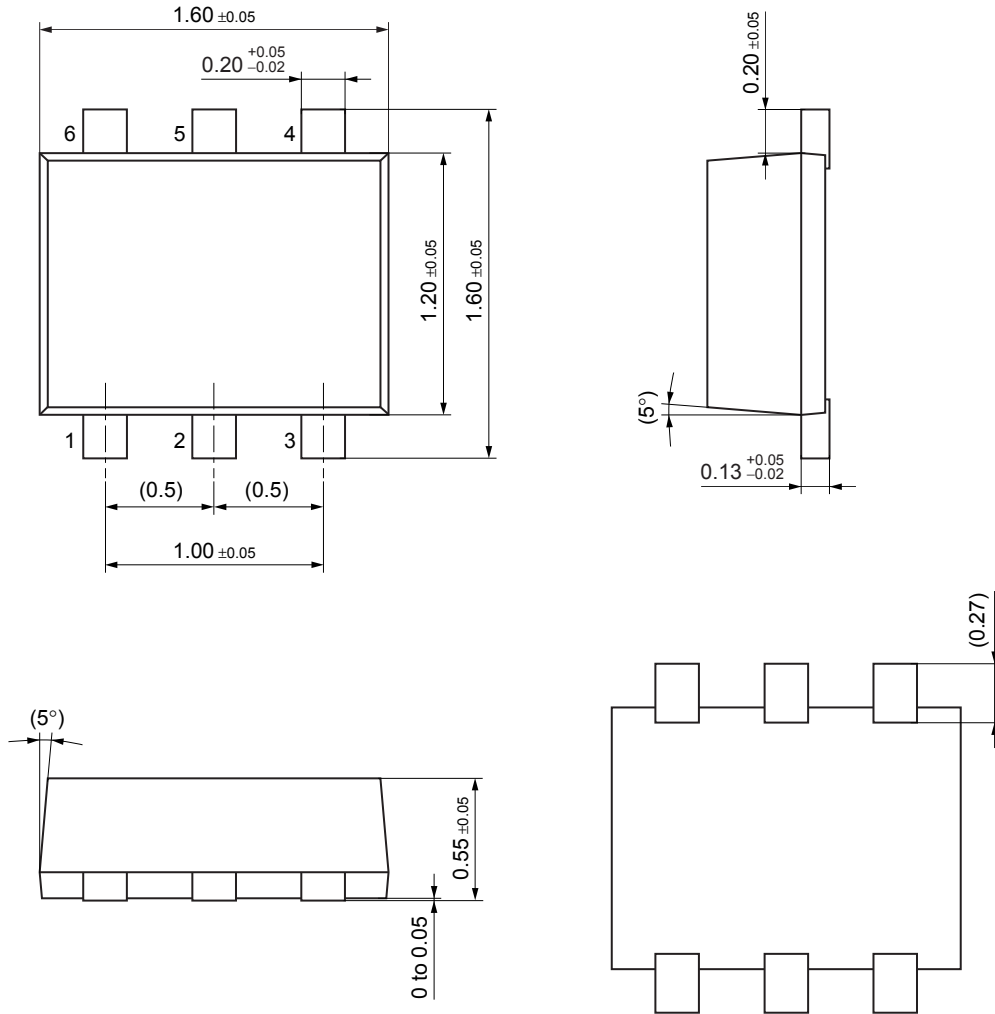
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	$V_{\text{CBO}}$	$I_{\text{C}} = 10 \mu\text{A}$ , $I_{\text{E}} = 0$	60			V
Collector-emitter voltage (Base open)	$V_{\text{CEO}}$	$I_{\text{C}} = 2 \text{ mA}$ , $I_{\text{B}} = 0$	50			V
Emitter-base voltage (Collector open)	$V_{\text{EBO}}$	$I_{\text{E}} = 10 \mu\text{A}$ , $I_{\text{C}} = 0$	7			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)	$I_{\text{CEO}}$	$V_{\text{CE}} = 10 \text{ V}$ , $I_{\text{B}} = 0$			100	$\mu\text{A}$
Forward current transfer ratio	$h_{\text{FE}}$	$V_{\text{CE}} = 10 \text{ V}$ , $I_{\text{C}} = 2 \text{ mA}$	210		460	—
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}} = 100 \text{ mA}$ , $I_{\text{B}} = 10 \text{ mA}$		0.13	0.3	V
Transition frequency	$f_{\text{T}}$	$V_{\text{CE}} = 10 \text{ V}$ , $I_{\text{C}} = 2 \text{ mA}$		150		MHz
Collector output capacitance (Common base, input open circuited)	$C_{\text{ob}}$	$V_{\text{CB}} = 10 \text{ V}$ , $I_{\text{E}} = 0$ , $f = 1 \text{ MHz}$		1.5		pF

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



SSMini6-F3-B

Unit: mm



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