

# 2SA2079

## Silicon PNP epitaxial planar type

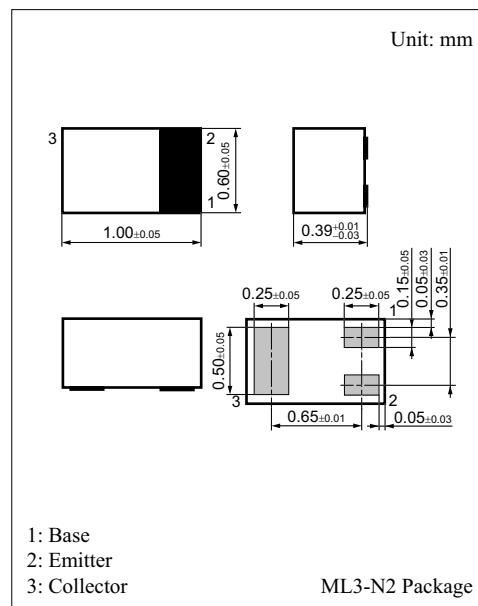
For general amplification  
Complementary to 2SC5848

### ■ Features

- High forward current transfer ratio  $h_{FE}$
- Suitable for high-density mounting and downsizing of the equipment for ultraminiature leadless package  
Package: 0.6 mm × 1.0 mm (height 0.39 mm)

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

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	−45	V
Collector-emitter voltage (Base open)	$V_{CEO}$	−45	V
Emitter-base voltage (Collector open)	$V_{EBO}$	−7	V
Collector current	$I_C$	−100	mA
Peak collector current	$I_{CP}$	−200	mA
Collector power dissipation	$P_C$	100	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	−55 to +125	$^\circ\text{C}$

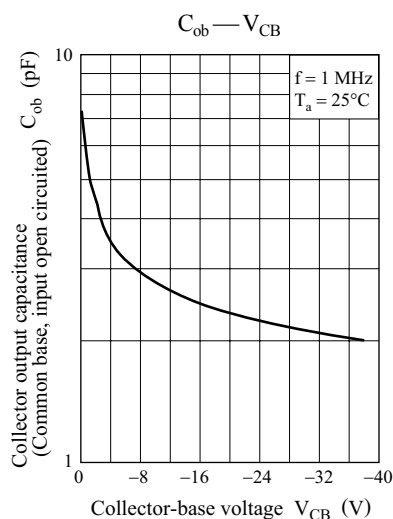
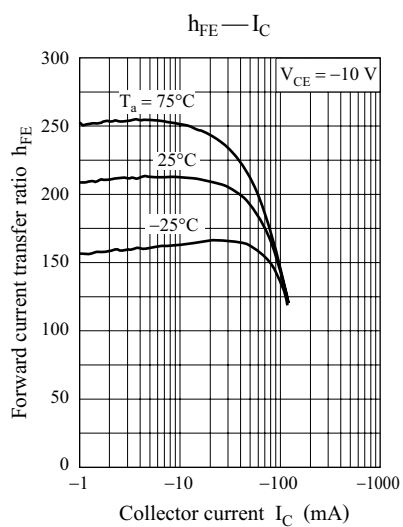
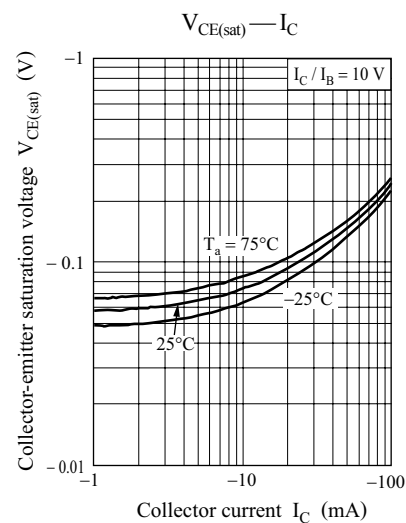
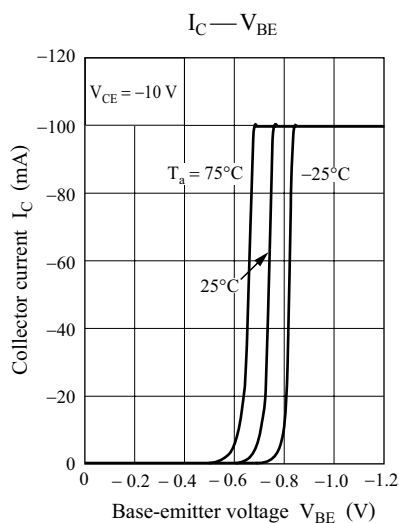
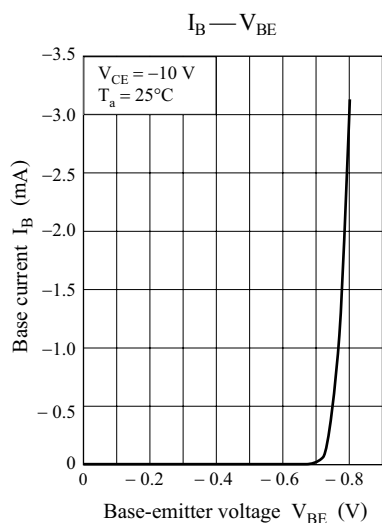
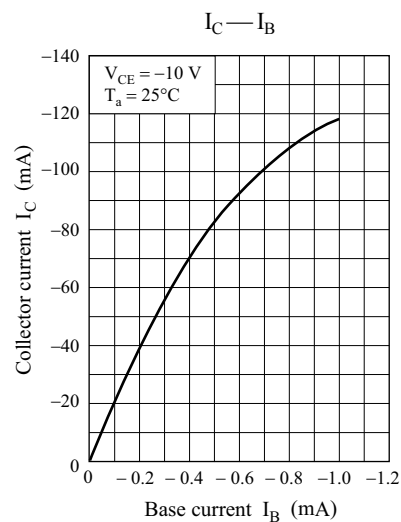
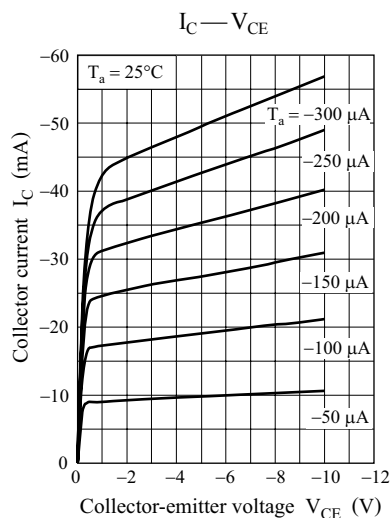
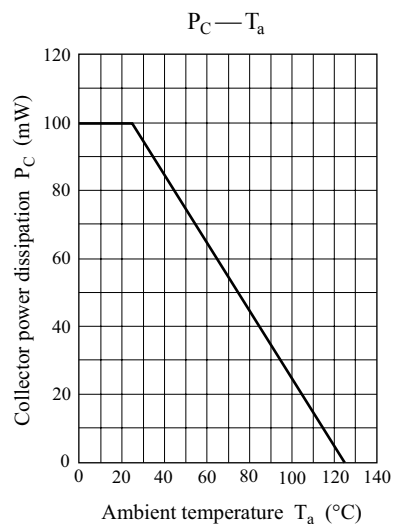


Marking Symbol : 3D

### ■ 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)	$V_{CBO}$	$I_C = -10 \mu\text{A}$ , $I_E = 0$	−45			V
Collector-emitter voltage (Base open)	$V_{CEO}$	$I_C = -2 \text{ mA}$ , $I_B = 0$	−45			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = -10 \mu\text{A}$ , $I_C = 0$	−7			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = -20 \text{ V}$ , $I_E = 0$			−0.1	$\mu\text{A}$
Collector-emitter cut-off current (Base open)	$I_{CEO}$	$V_{CE} = -10 \text{ V}$ , $I_B = 0$			−100	$\mu\text{A}$
Forward current transfer ratio	$h_{FE}$	$V_{CE} = -10 \text{ V}$ , $I_C = -2 \text{ mA}$	180		390	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100 \text{ mA}$ , $I_B = -10 \text{ mA}$		−0.2	−0.5	V
Transition frequency	$f_T$	$V_{CB} = -10 \text{ V}$ , $I_E = 1 \text{ mA}$ , $f = 200 \text{ MHz}$		80		MHz
Collector output capacitance (Common base, input open circuited)	$C_{ob}$	$V_{CB} = -10 \text{ V}$ , $I_E = 0$ , $f = 1 \text{ MHz}$		2.2		pF

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



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