

# 2SD0662, 2SD0662B (2SD662, 2SD662B)

Silicon NPN epitaxial planar type

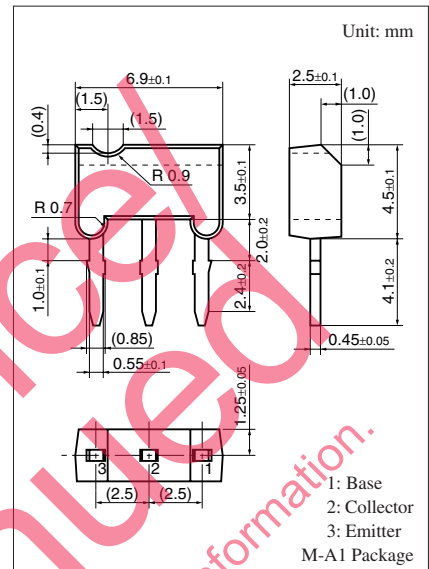
For high breakdown voltage general amplification

## ■ Features

- High collector-emitter voltage (Base open)  $V_{CE0}$
- High transition frequency  $f_T$
- M type package allowing easy automatic and manual insertion as well as stand-alone fixing to the printed circuit board.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	2SD0662	$V_{CBO}$ 250	V
	2SD0662B	400	
Collector-emitter voltage (Base open)	2SD0662	$V_{CEO}$ 200	V
	2SD0662B	400	
Emitter-base voltage (Collector open)	$V_{EBO}$	5	V
Collector current	$I_C$	70	mA
Collector power dissipation	$P_C$	600	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$



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

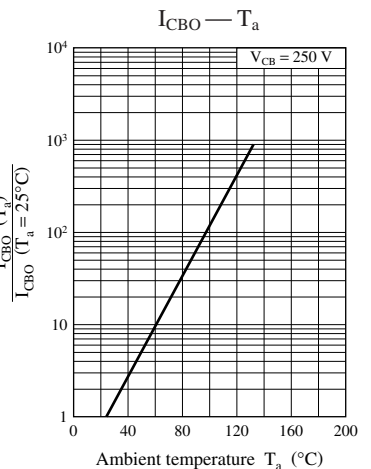
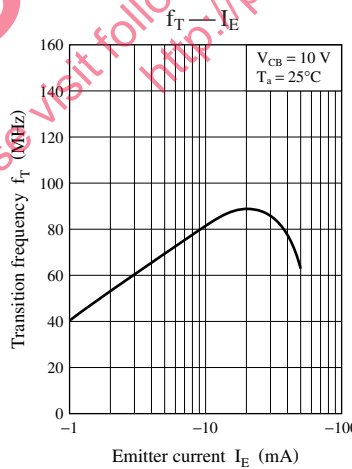
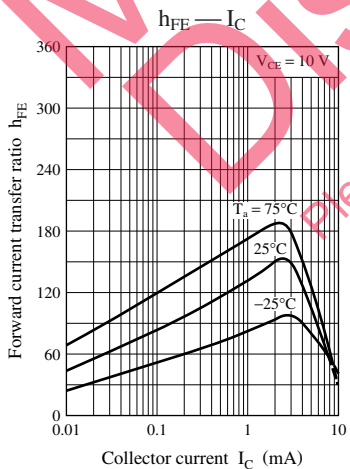
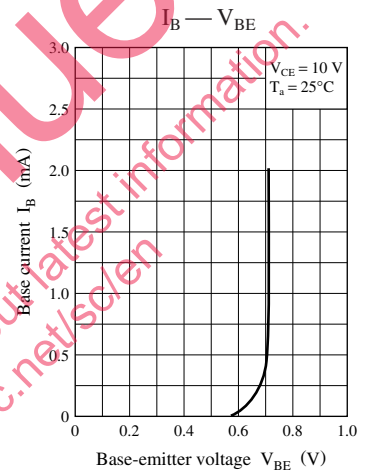
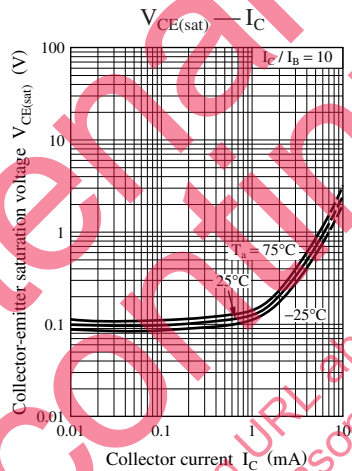
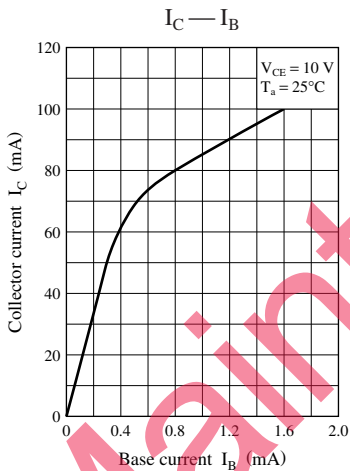
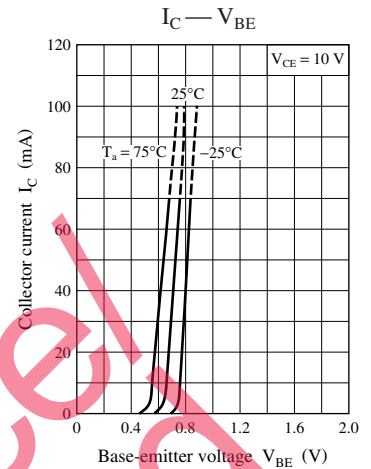
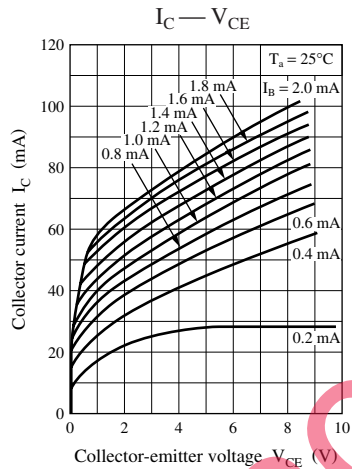
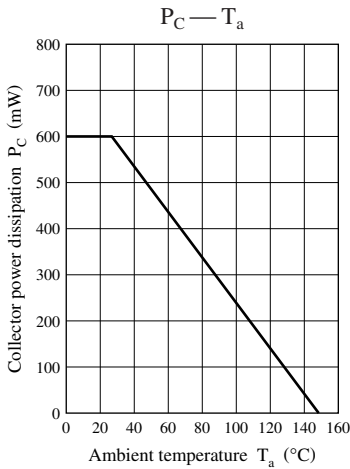
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	2SD0662	$I_C = 100 \mu\text{A}, I_B = 0$	200			V
	2SD0662B		400			
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = 10 \mu\text{A}, I_C = 0$	5			V
Collector-emitter cutoff current (Base open)	$I_{CEO}$	$V_{CE} = 100 \text{V}, I_B = 0$			2	$\mu\text{A}$
Forward current transfer ratio	$h_{FE}^*$	$V_{CE} = 10 \text{V}, I_C = 5 \text{mA}$	30		220	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 50 \text{mA}, I_B = 5 \text{mA}$			1.2	V
Transition frequency	$f_T$	$V_{CB} = 10 \text{V}, I_E = -10 \text{mA}, f = 200 \text{MHz}$	50			MHz
Collector output capacitance (Common base, input open circuited)	$C_{ob}$	$V_{CB} = 10 \text{V}, I_E = 0, f = 1 \text{MHz}$			10	pF

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

2. \*: Rank classification

Rank	P	Q	R
$h_{FE}$	30 to 100	60 to 150	100 to 220

Note) The part numbers in the parenthesis show conventional part number.



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