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

### Silicon NPN epitaxial planar type

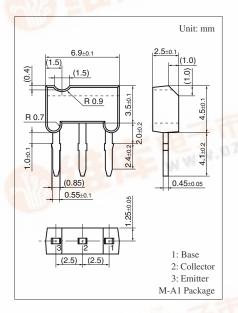
For high breakdown voltage general amplification

#### ■ Features

- High collector-emitter voltage (Base open) V<sub>CEO</sub>
- High transition frequency f<sub>T</sub>
- M type package allowing easy automatic and manual insertion as well as stand-alone fixing to the printed circuit board.

#### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage	2SD0662	$V_{CBO}$	250	V
(Emitter open)	2SD0662B		400	
Collector-emitter voltage	2SD0662	V <sub>CEO</sub>	200	V
(Base open)	2SD0662B	MAN.	400	
Emitter-base voltage (Coll	V <sub>EBO</sub>	5	V	
Collector current	$I_C$	70	mA	
Collector power dissipation	P <sub>C</sub>	600	mW	
Junction temperature	$T_{j}$	150	°C	
Storage temperature	$T_{stg}$	-55 to +150	°C	



#### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

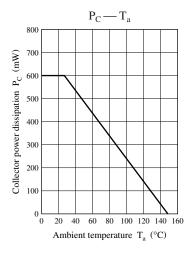
Parameter		Symbol	Conditions	Min	Тур	Max	Unit
Collector-emitter voltage	2SD0662	$V_{CEO}$	$I_C = 100 \ \mu A, I_B = 0$	200			V
(Base open)	2SD0662B			400			
Emitter-base voltage (Collector open)		V <sub>EBO</sub>	$I_E = 10 \ \mu A, \ I_C = 0$	5			V
Collector-emitter cutoff current (Base open)		$I_{CEO}$	$V_{CE} = 100 \text{ V}, I_B = 0$			2	μΑ
Forward current transfer ratio		h <sub>FE</sub> *	$V_{CE} = 10 \text{ V}, I_{C} = 5 \text{ mA}$	30		220	27.0
Collector-emitter saturation voltage		V <sub>CE(sat)</sub>	$I_C = 50 \text{ mA}, I_B = 5 \text{ mA}$			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		C <sub>ob</sub>	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$			10	pF
(Common base, input open circuited)			70 120				

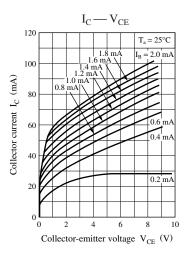
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

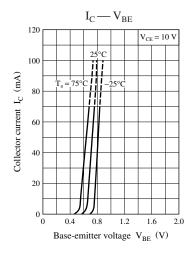
#### 2. \*: Rank classification

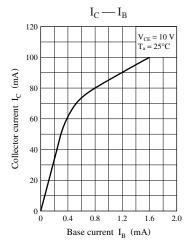
1	Rank	Р	Q	R	
	$h_{FE}$	30 to 100	60 to 150	100 to 220	

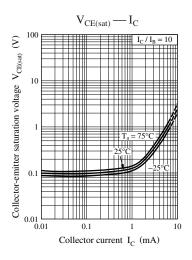


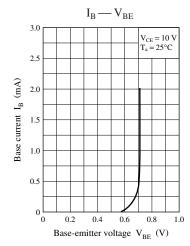


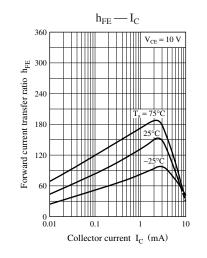


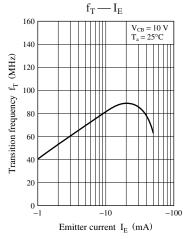


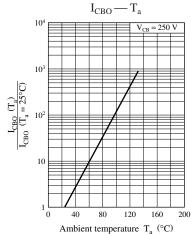












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