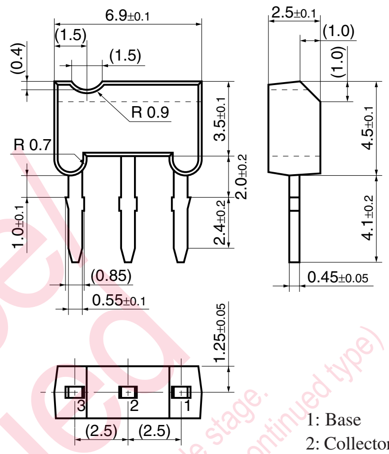
2SD0662, 2SD0662B (2SD662, 2SD662B)

Silicon NPN epitaxial planar type

For high breakdown voltage general amplification

Unit: mm



1: Base
2: Collector
3: Emitter
M-A1 Package

■ Features

- High collector-emitter voltage (Base open) V_{CEO}
- 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 $T_a = 25°C$

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	°C
Storage temperature		T_{stg}	−55 to +150	°C

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

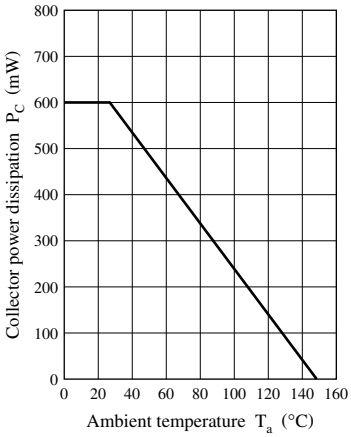
Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	2SD0662	V_{CEO}	$I_C = 100$ µA, $I_B = 0$	200			V
	2SD0662B			400			
Emitter-base voltage (Collector open)		V_{EBO}	$I_E = 10$ µA, $I_C = 0$	5			V
Collector-emitter cutoff current (Base open)		I_{CEO}	$V_{CE} = 100$ V,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

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.
2. *: Rank classification

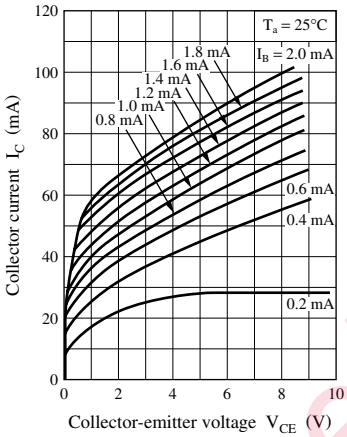
Rank	P	Q	R
h_{FE}	30 to 100	60 to 150	100 to 220

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

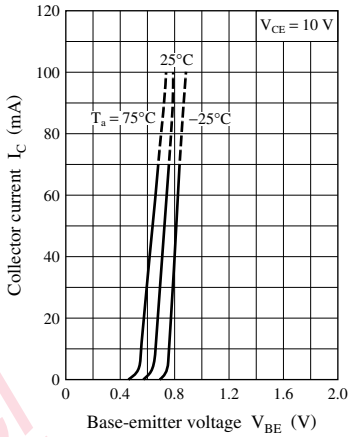
P_C — T_a



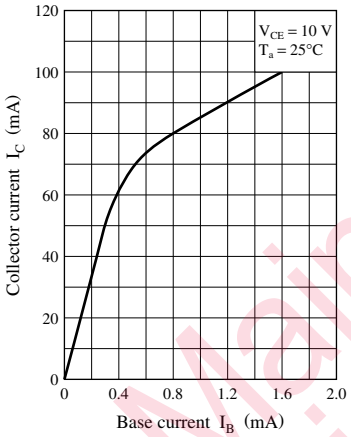
I_C — V_{CE}



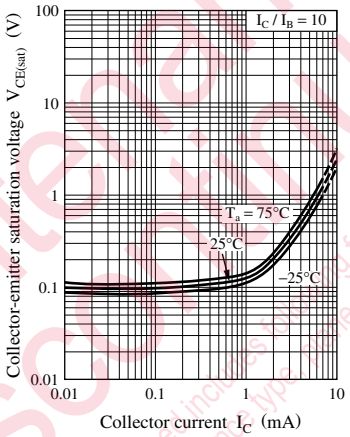
I_C — V_{BE}



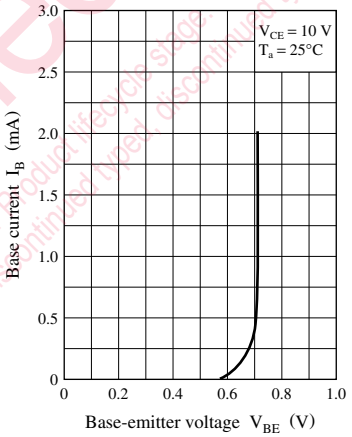
I_C — I_B



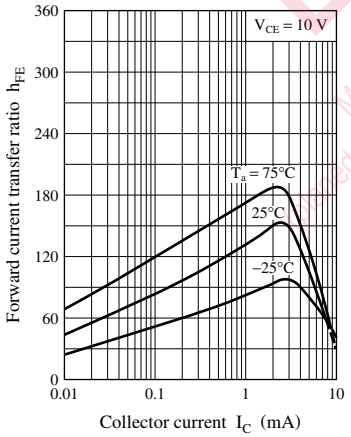
$V_{CE(sat)}$ — I_C



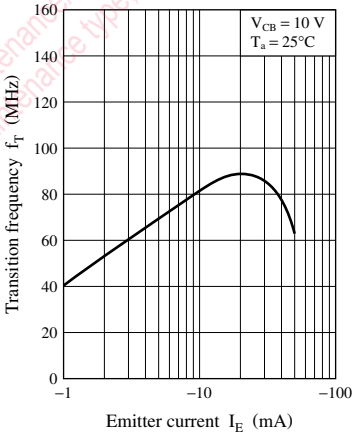
I_B — V_{BE}



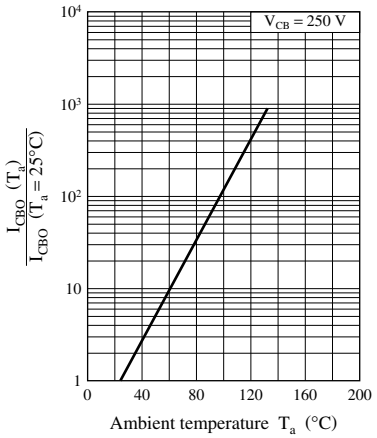
h_{FE} — I_C



f_T — I_E



I_{CBO} — T_a



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