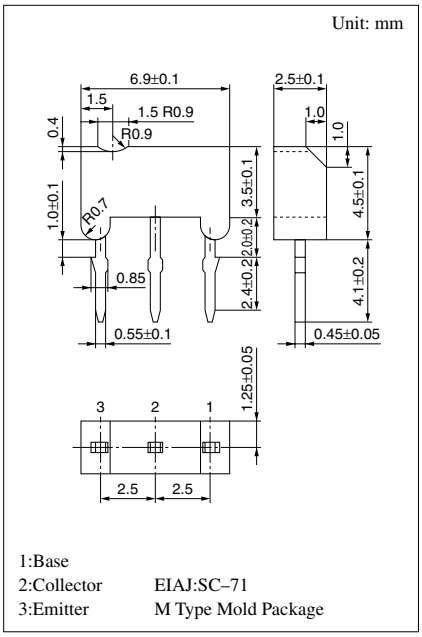
2SD0662, 2SD0662B (2SD662, 2SD662B)

Silicon NPN epitaxial planer type

For high breakdown voltage general amplification



Features

- High collector to emitter voltage 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 (Ta=25˚C)

Parameter		Symbol	Ratings	Unit
Collector to base voltage	2SD0662	V_{CBO}	250	V
	2SD0662B		400	
Collector to emitter voltage	2SD0662	V_{CEO}	200	V
	2SD0662B		400	
Emitter to base voltage		V_{EBO}	5	V
Peak collector current		I_{CP}	100	mA
Collector current		I_C	70	mA
Collector power dissipation		P_C	600	mW
Junction temperature		T_j	150	˚C
Storage temperature		T_{stg}	–55 ~ +150	˚C

Electrical Characteristics (Ta=25˚C)

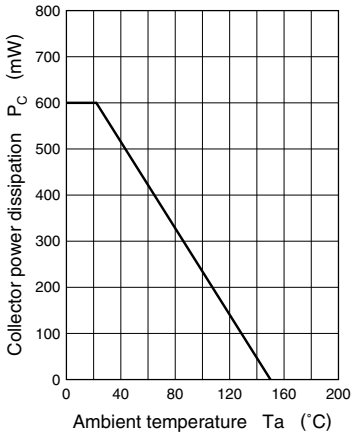
Parameter		Symbol	Conditions	min	typ	max	Unit
Collector cutoff current		I_{CEO}	V_{CE} = 100V, I_B = 0			2	µA
Collector to emitter voltage	2SD0662	V_{CEO}	I_C = 100µA, I_B = 0	200			V
	2SD0662B			400			
Emitter to base voltage		V_{EBO}	I_E = 10µA, I_C = 0	5			V
Forward current transfer ratio	2SD0662	h_{FE}*	V_{CE} = 10V, I_C = 5mA	30		220	
	2SD0662B			30		150	
Collector to emitter saturation voltage		$V_{CE(sat)}$	I_C = 50mA, I_B = 5mA			1.2	V
Transition frequency		f_T	V_{CB} = 10V, I_E = –10mA, f = 200MHz	50	80		MHz
Collector output capacitance		C_{ob}	V_{CB} = 10V, I_E = 0, f = 1MHz		5	10	pF

*h_{FE} Rank classification

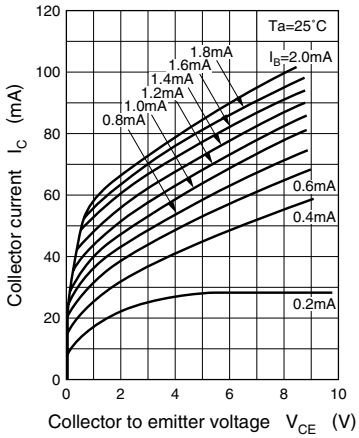
Rank	P	Q	R
h_{FE}	30 ~ 100	60 ~ 150	100 ~ 220

Note.) The Part numbers in the Parenthesis show conventional part number.

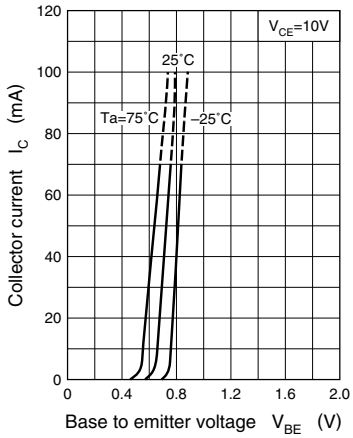
P_C — Ta



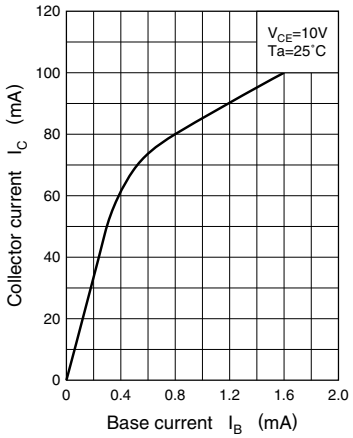
I_C — V_{CE}



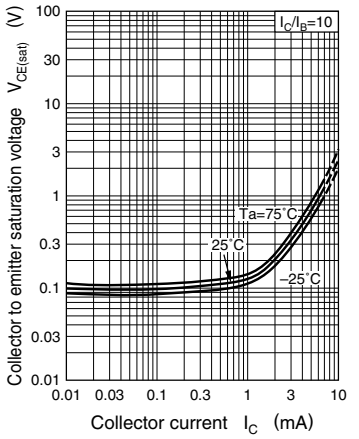
I_C — V_{BE}



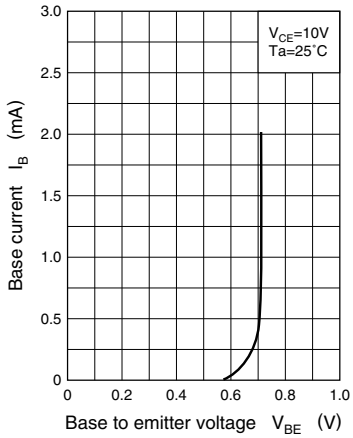
I_C — I_B



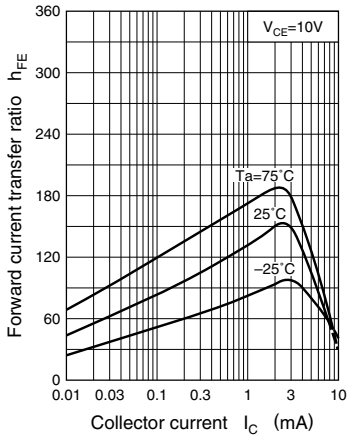
$V_{CE(sat)}$ — I_C



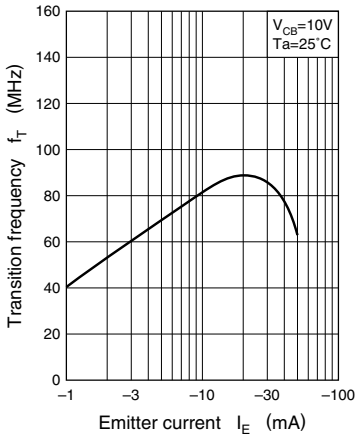
I_B — V_{BE}



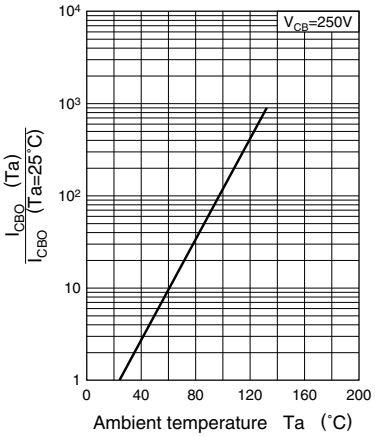
h_{FE} — I_C



f_T — I_E



I_{CBO} — Ta



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