

# 2SD662, 2SD662B

## Silicon NPN epitaxial planer type

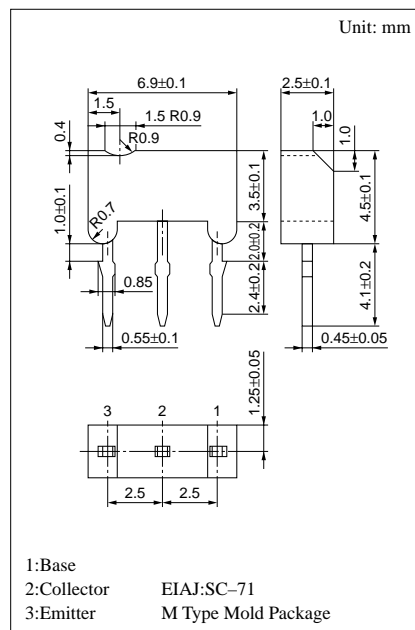
For high breakdown voltage general amplification

### 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 ( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	250	V
2SD662B		400	
Collector to emitter voltage	$V_{CEO}$	200	V
2SD662B		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	$^\circ\text{C}$
Storage temperature	$T_{stg}$	$-55 \sim +150$	$^\circ\text{C}$

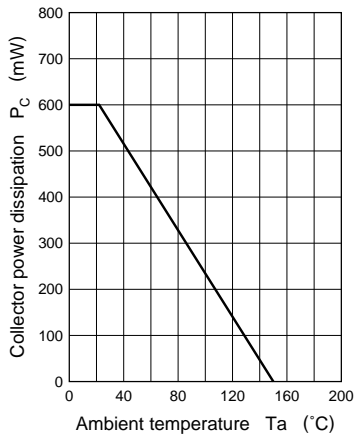
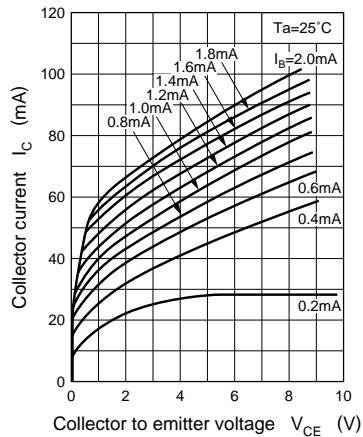
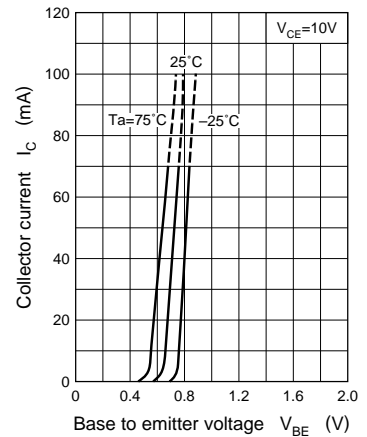
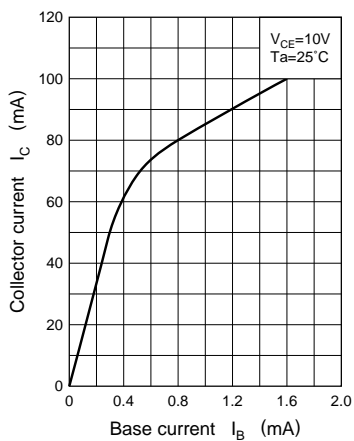
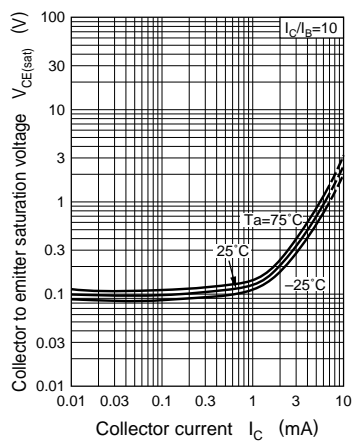
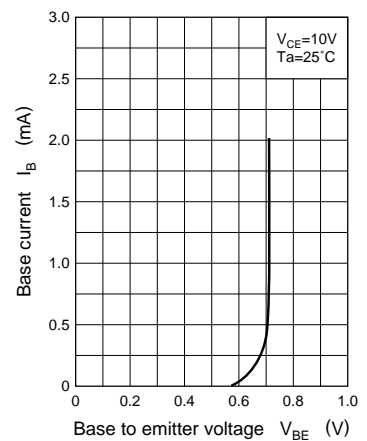
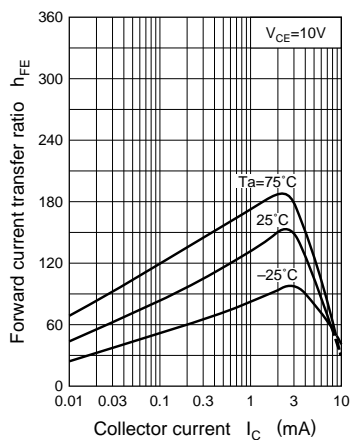
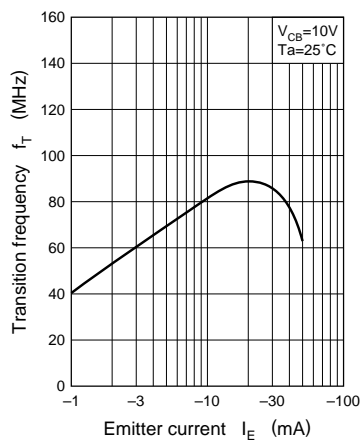


### Electrical Characteristics ( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	$I_{CEO}$	$V_{CE} = 100\text{V}, I_B = 0$			2	$\mu\text{A}$
Collector to emitter voltage	2SD662	$I_C = 100\mu\text{A}, I_B = 0$	200			V
	2SD662B		400			
Emitter to base voltage	$V_{EBO}$	$I_E = 10\mu\text{A}, I_C = 0$	5			V
Forward current transfer ratio	2SD662	$V_{CE} = 10\text{V}, I_C = 5\text{mA}$	30		220	
	2SD662B		30		150	
Collector to 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	80		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$		5	10	pF

\* $h_{FE}$  Rank classification

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

$P_C - T_a$  $I_C - V_{CE}$  $I_C - V_{BE}$  $I_C - I_B$  $V_{CE(sat)} - I_C$  $I_B - V_{BE}$  $h_{FE} - I_C$  $f_T - I_E$  $I_{CBO} - T_a$ 