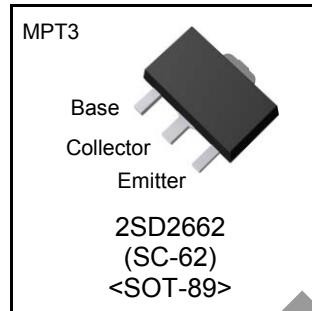


Parameter	Value
V_{CEO}	30V
I_C	1.5A

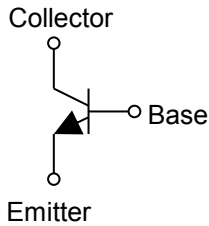
●Features

- 1) Suitable for Middle Power Driver
- 2) Complementary PNP Types : 2SB1698
- 3) Low $V_{CE(sat)}$
 $V_{CE(sat)}=0.35V(\text{Max.})$
 $(I_C/I_B=1A/50mA)$
- 4) Lead Free/RoHS Compliant.

●Outline



●Inner circuit



●Applications

Motor driver , LED driver
Power supply

●Packaging specifications

Part No.	Package	Package size (mm)	Taping code	Reel size (mm)	Tape width (mm)	Basic ordering unit (pcs)	Marking
2SD2662	MPT3	4540	T100	180	12	1,000	FZ

Not Recommended for New Designs

● **Absolute maximum ratings** (Ta = 25°C)

Parameter		Symbol	Values	Unit
Collector-base voltage		V_{CB0}	30	V
Collector-emitter voltage		V_{CEO}	30	V
Emitter-base voltage		V_{EBO}	6	V
Collector current	DC	I_C	1.5	A
	Pulsed	I_{CP}^{*1}	3.0	A
Power dissipation		P_D^{*2}	0.5	W
		P_D^{*3}	2.0	W
Junction temperature		T_j	150	°C
Range of storage temperature		T_{stg}	-55 to +150	°C

*1 Pw=1ms , single pulse

*2 Each terminal mounted on a reference land

*3 Mounted on a ceramic board (40×40×0.7mm)

● **Electrical characteristics** (Ta = 25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = 1mA$	30	-	-	V
Collector-base breakdown voltage	BV_{CB0}	$I_C = 10\mu A$	30	-	-	V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = 10\mu A$	6	-	-	V
Collector cut-off current	I_{CB0}	$V_{CB} = 30V$	-	-	100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = 6V$	-	-	100	nA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1A, I_B = 50mA$	-	160	350	mV
DC current gain	h_{FE}	$V_{CE} = 2V, I_C = 100mA$	270	-	680	-
Transition frequency	f_T	$V_{CE} = 2V, I_E = -100mA$ $f = 100MHz$	-	330	-	MHz
Output capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0A$ $f = 1MHz$	-	11	-	pF

●Electrical characteristic curves(Ta = 25°C)

Fig.1 Ground Emitter Propagation Characteristics

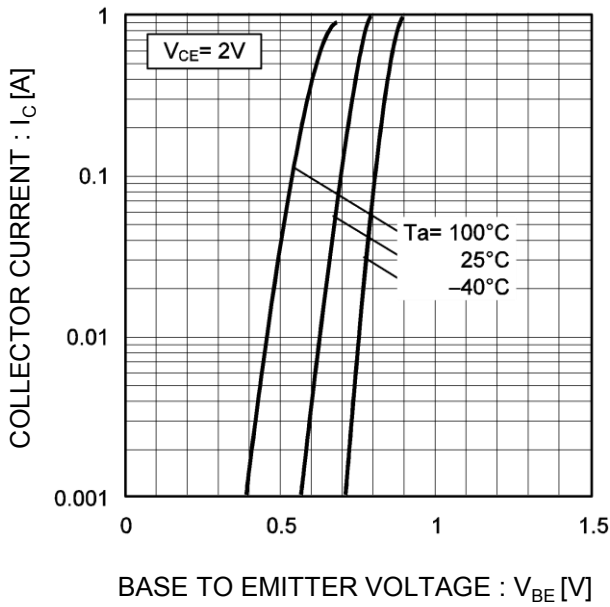


Fig.2 Typical Output Characteristics

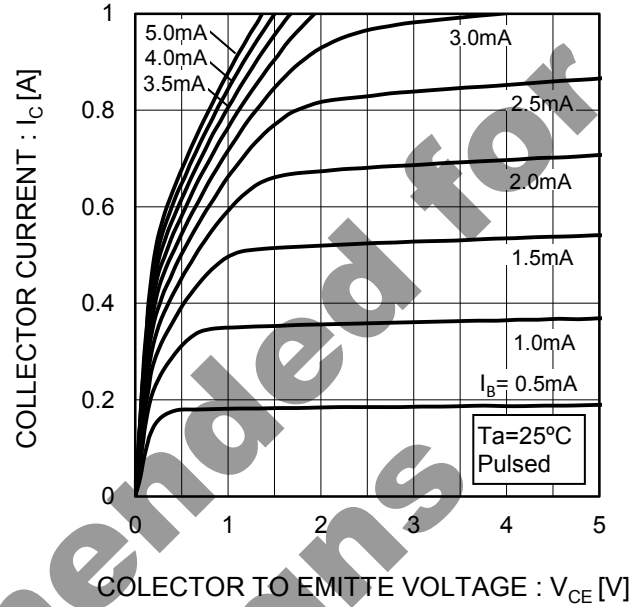


Fig.3 DC Current Gain vs. Collector Current(I)

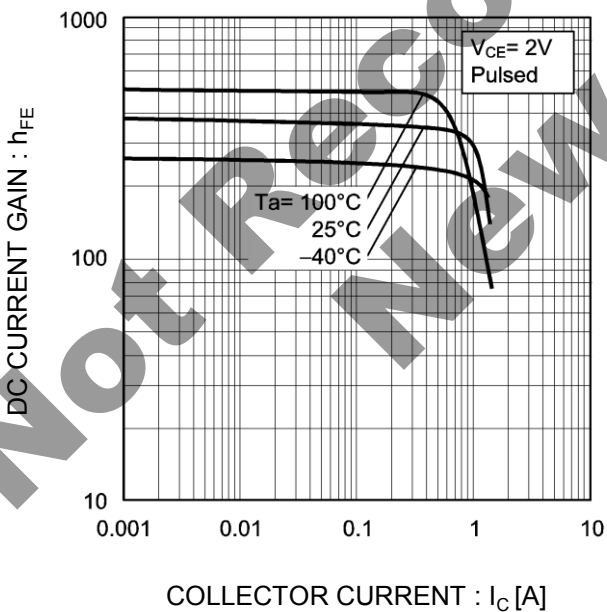
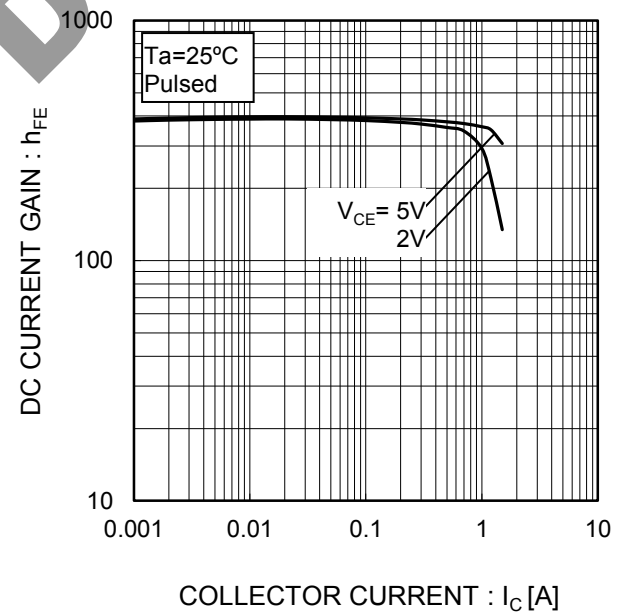


Fig.4 DC Current Gain vs. Collector Current(II)



●Electrical characteristic curves(Ta = 25°C)

Fig.5 Collector-Emitter Saturation Voltage vs. Collector Current (I)

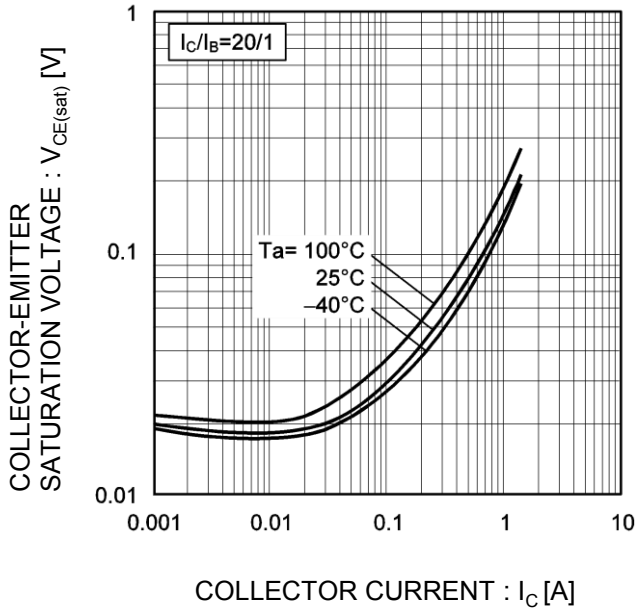


Fig.6 Collector-Emitter Saturation Voltage vs. Collector Current (II)

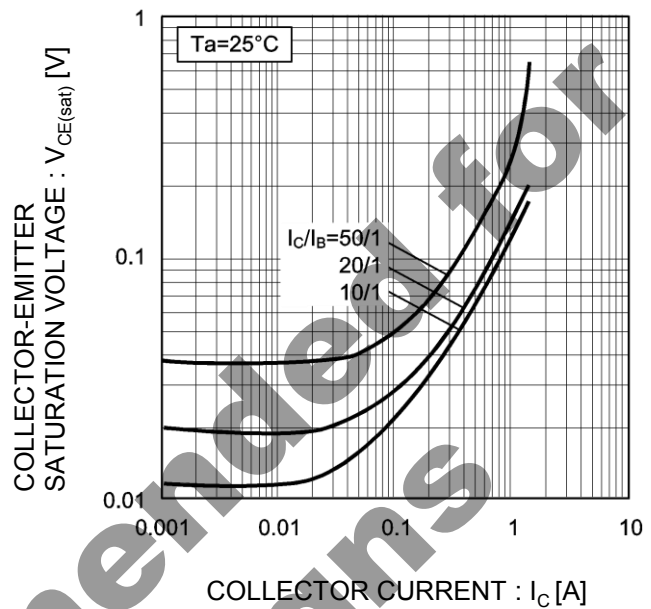


Fig.7 Base-Emitter Saturation Voltage vs. Collector Current

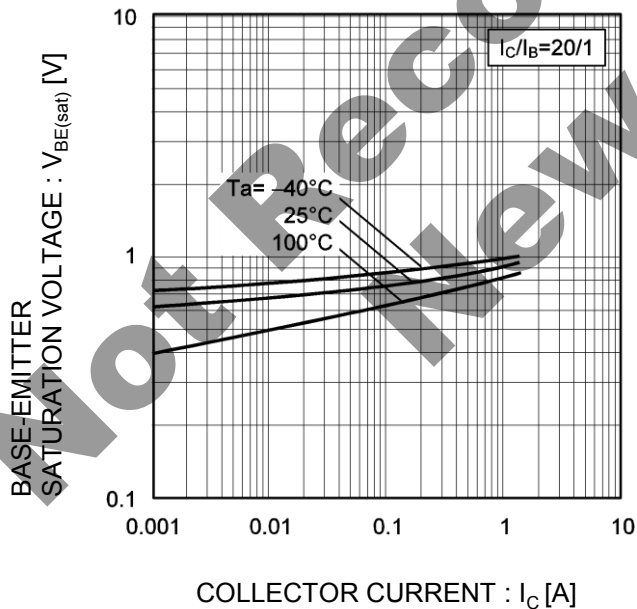
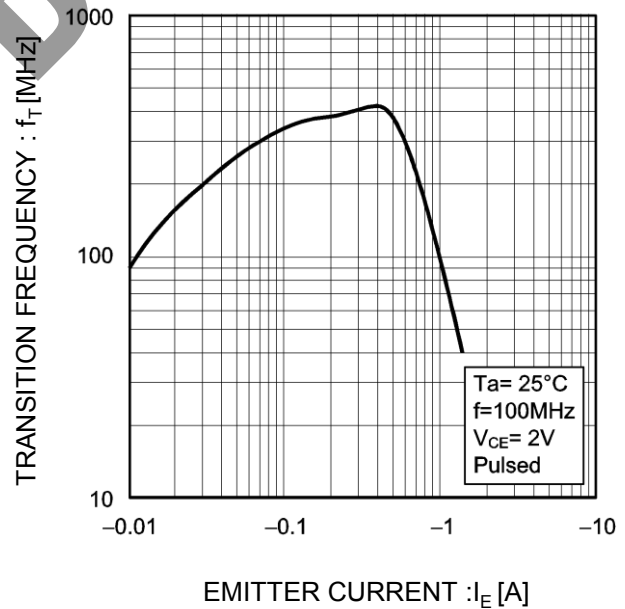


Fig.8 Gain Bandwidth Product vs. Emitter Current



●Electrical characteristic curves(Ta = 25°C)

Fig.9 Emitter input capacitance vs. Emitter-Base Voltage
Collector output capacitance vs. Collector-Base Voltage

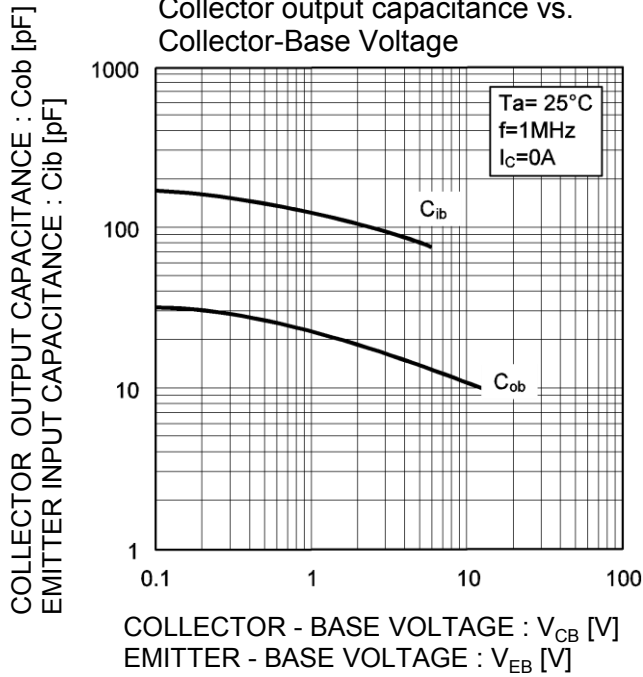
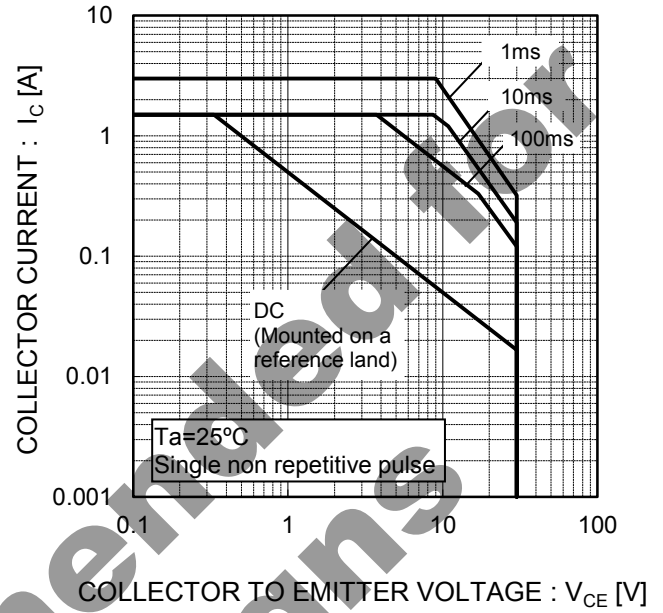
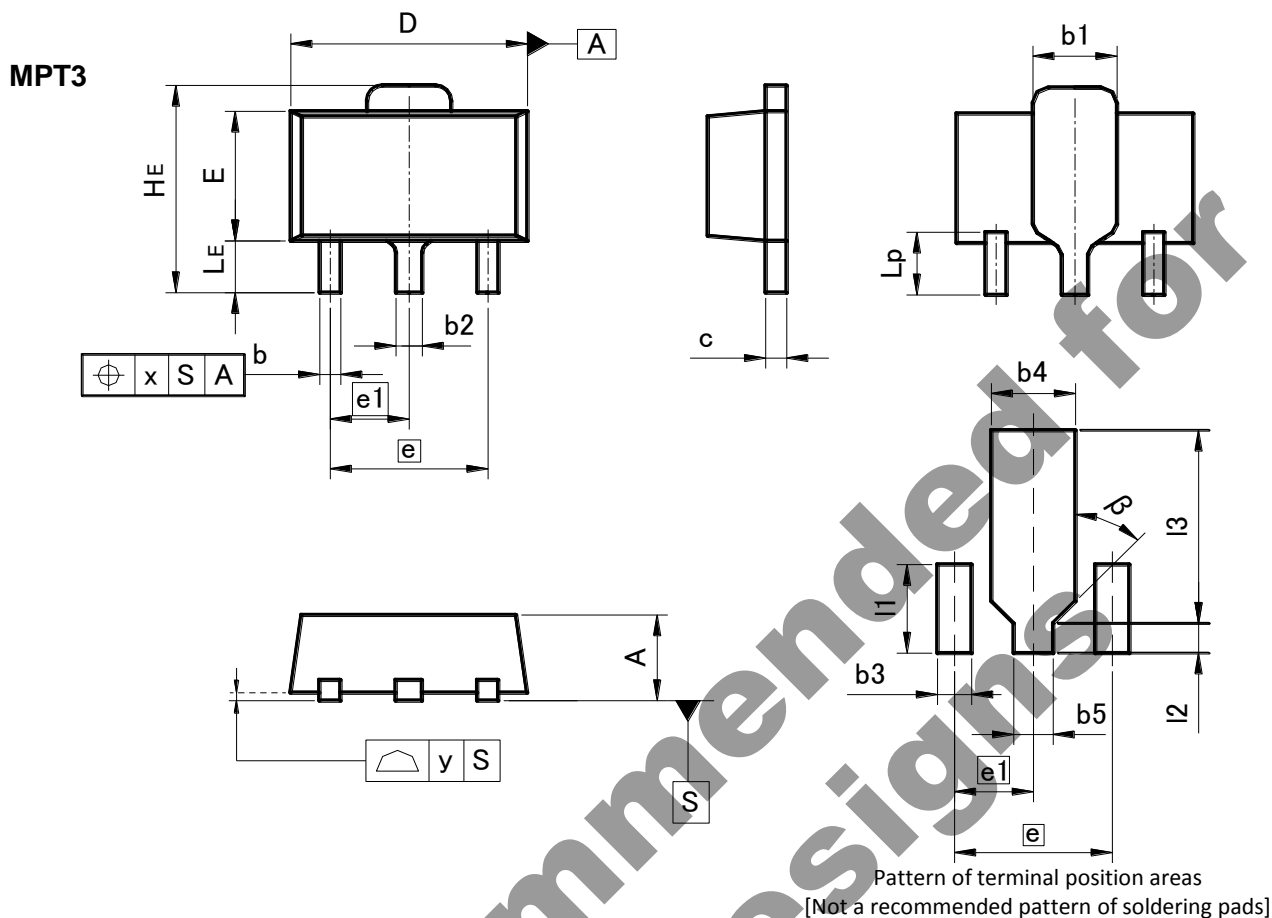


Fig.10 Safe Operating Area



Not Recommended for New Design

●Dimensions (Unit : mm)



DIM	MILIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.40	1.50	0.055	0.059
b	0.30	0.50	0.012	0.020
b1	1.50	1.70	0.059	0.067
b2	0.40	0.60	0.016	0.024
c	0.35	0.50	0.014	0.020
D	4.40	4.70	0.173	0.185
E	2.40	2.70	0.094	0.106
e	3.00		0.118	
e1	1.50		0.059	
HE	3.70	4.30	0.146	0.169
LE	0.80	1.20	0.031	0.047
Lp	1.01	1.41	0.040	0.056
x	-	0.15	-	0.006
y	-	0.10	-	0.004

DIM	MILIMETERS		INCHES	
	MIN	MAX	MIN	MAX
b3	-	0.65	-	0.026
b4	-	1.70	-	0.067
b5	-	0.75	-	0.030
l1	-	1.71	-	0.067
l2	-	0.58	-	0.023
l3	-	3.72	-	0.146
β	45°		45°	

Dimension in mm / inches

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