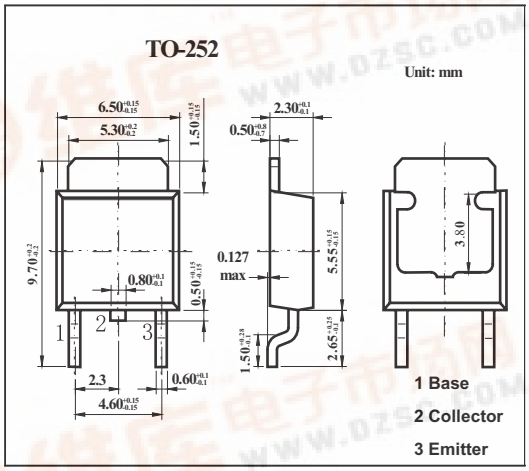
Silicon PNP Triple Diffused Type

2SB1667



■ Features

- Low collector saturation voltage.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-60	V
Collector-emitter voltage	V_{CEO}	-60	V
Emitter-base voltage	V_{EBO}	-7	V
Collector current	I_C	-3	A
Base current	I_B	-0.5	A
Collector power dissipation Ta = 25℃	P_C	1.5	W
Collector power dissipation Tc = 25℃	P_C	25	W
Junction temperature	Tj	150	℃
Storage temperature range	T_{stg}	-55 to +150	℃

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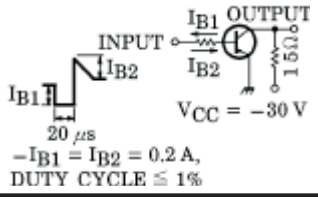
■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	V_{CB} = -60 V, I_E = 0			-100	μA
Emitter cut-off current	I_{EBO}	V_{EB} = -7 V, I_C = 0			-100	μA
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-50mA, I_B=0	-60			V
DC current gain	h_{FE}	V_{CE} = -5 V, I_C = -0.5 A	60		300	
		V_{CE} = -5 V, I_C = -3 A	20			
Collector-emitter saturation voltage	$V_{CE\ (sat)}$	I_C = -3 A, I_B = -0.3 A		-0.5	-1.7	V
Base-emitter voltage	V_{BE}	V_{CE} = -5A, I_C =-0.5 A		-0.7	-1.0	V
Transition frequency	f_T	V_{CE} = -5V, I_C =-0.5 A		9		MHz
Collector output capacitance	C_{ob}	V_{CB} = -10V, I_E = 0, f = 1 MHz		150		pF
Turn-on time	t_{on}			0.4		μs
Storage time	t_{stg}			1.7		μs
Fall time	t_f			0.5		μs

■ h_{FE} Classification

Rank	O	Y
hFE	60～120	100～200