

2SB1498

Silicon PNP triple diffusion planar type

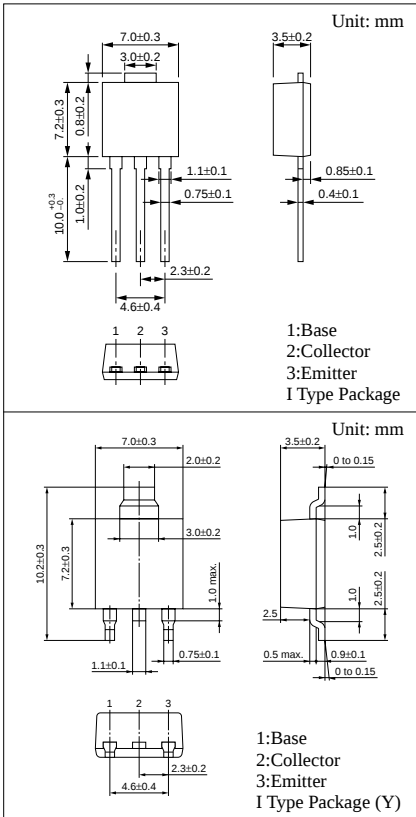
For power switching

■ Features

- High-speed switching
- High collector to base voltage V_{CBO}
- I type package enabling direct soldering of the radiating fin to the printed circuit board, etc. of small electronic equipment.

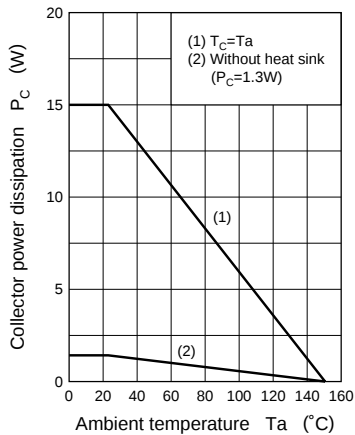
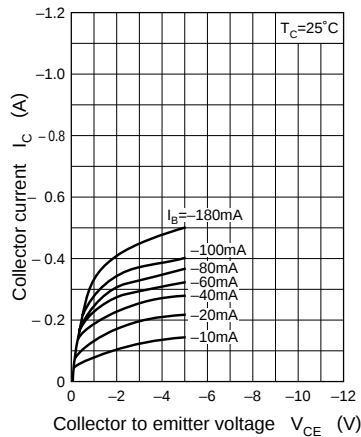
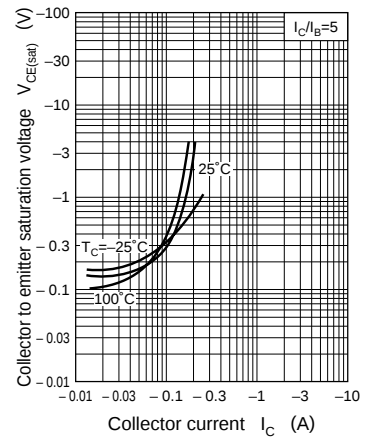
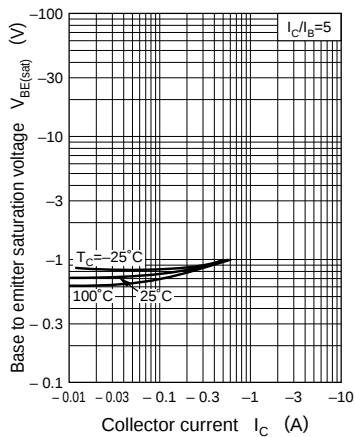
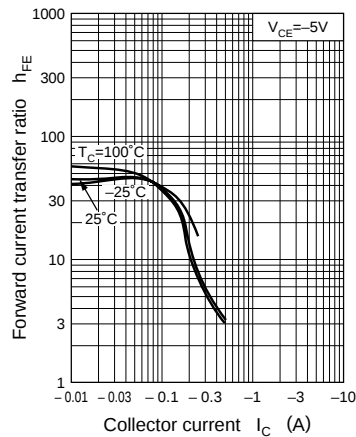
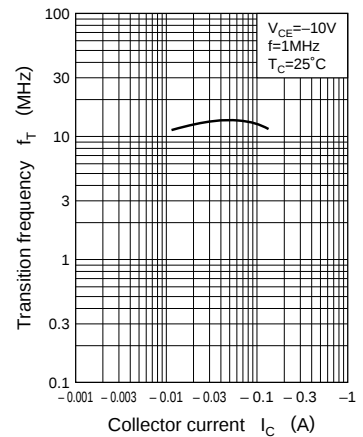
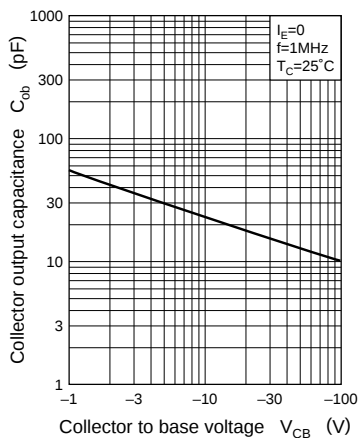
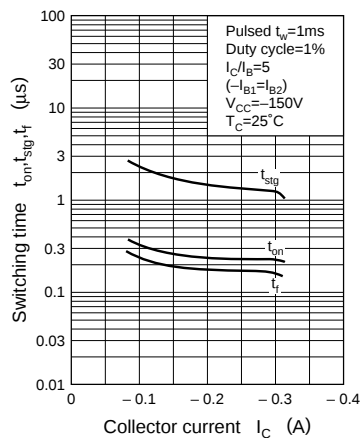
■ Absolute Maximum Ratings ($T_C=25^\circ\text{C}$)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	-600	V
Collector to emitter voltage	V_{CEO}	-600	V
Emitter to base voltage	V_{EBO}	-7	V
Peak collector current	I_{CP}	-0.6	A
Collector current	I_C	-0.3	A
Collector power dissipation	P_C	15	W
		1.3	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$



■ Electrical Characteristics ($T_C=25^\circ\text{C}$)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -600\text{V}, I_E = 0$			-100	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -7\text{V}, I_C = 0$			-100	μA
Collector to emitter voltage	V_{CEO}	$I_C = -10\text{mA}, I_B = 0$	-600			V
Forward current transfer ratio	h_{FE1}	$V_{CE} = -5\text{V}, I_C = -50\text{mA}$	30			
	h_{FE2}	$V_{CE} = -5\text{V}, I_C = -150\text{mA}$	8			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -150\text{mA}, I_B = -30\text{mA}$			-1.0	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = -150\text{mA}, I_B = -30\text{mA}$			-1.5	V
Transition frequency	f_T	$V_{CE} = -10\text{V}, I_C = -50\text{mA}, f = 1\text{MHz}$		10		MHz
Turn-on time	t_{on}	$I_C = -150\text{mA},$			1.0	μs
Storage time	t_{stg}	$I_{B1} = -30\text{mA}, I_{B2} = 60\text{mA},$			3.5	μs
Fall time	t_f	$V_{CC} = -200\text{V}$			0.5	μs

$P_C - T_a$  $I_C - V_{CE}$  $V_{CE(sat)} - I_C$  $V_{BE(sat)} - I_C$  $h_{FE} - I_C$  $f_T - I_C$  $C_{ob} - V_{CB}$  $t_{on}, t_{stg}, t_f - I_C$ 

Area of safe operation (ASO)

