



2SB1214

Driver Applications

Applications

- Motor drivers, hammer drivers, relay drivers.

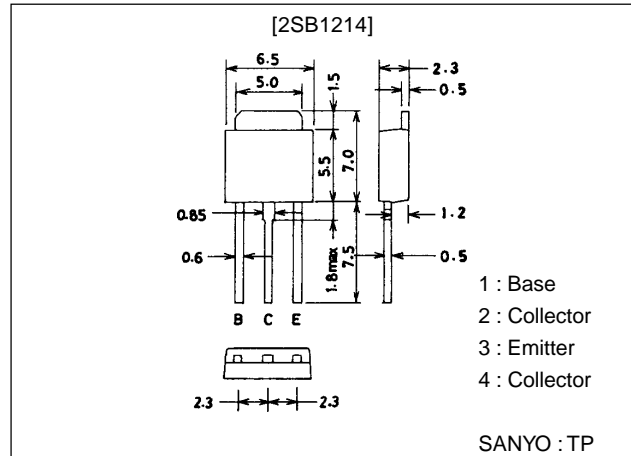
Features

- High DC current gain.
- Darlington connection.
- Small and slim package permitting the 2SB1214-applied sets to be made more compact.

Package Dimensions

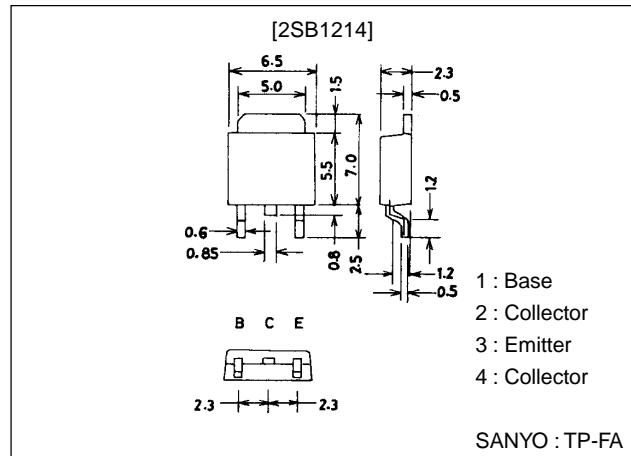
unit:mm

2045B



unit:mm

2044B



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Specifications

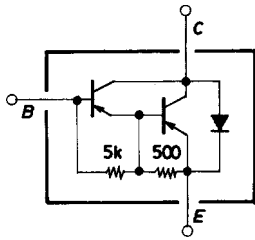
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		-80	V
Collector-to-Emitter Voltage	V_{CEO}		-60	V
Emitter-to-Base Voltage	V_{EBO}		-6	V
Collector Current	I_C		-3	A
Collector Current (Pulse)	I_{CP}		-6	A
Collector Dissipation	P_C		1	W
		$T_c=25^\circ\text{C}$	15	W
Junction Temperature	T_j		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

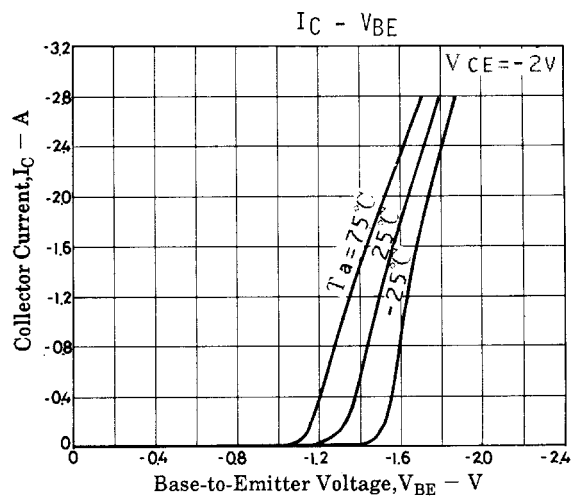
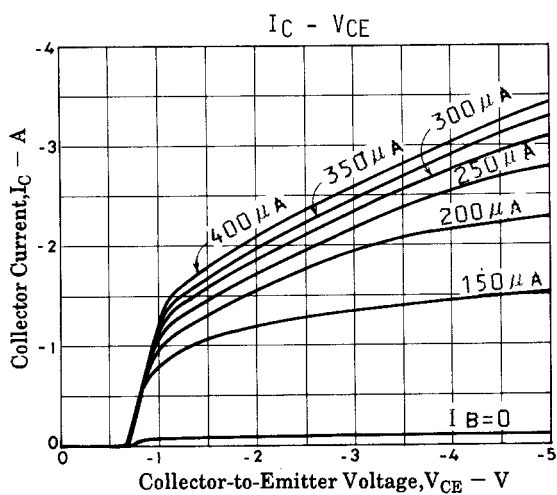
Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=-60\text{V}, I_E=0$			-10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-2.5	mA
DC Current Gain	h_{FE1}	$V_{CE}=-2\text{V}, I_C=-1\text{A}$	2000			
	h_{FE2}	$V_{CE}=-2\text{V}, I_C=-2\text{A}$	1000			
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-2\text{A}, I_B=-4\text{mA}$			-1.5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-2\text{A}, I_B=-4\text{mA}$			-2.0	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-1\text{mA}, I_E=0$	-80			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-25\text{mA}, R_{BE}=\infty$	-60			V

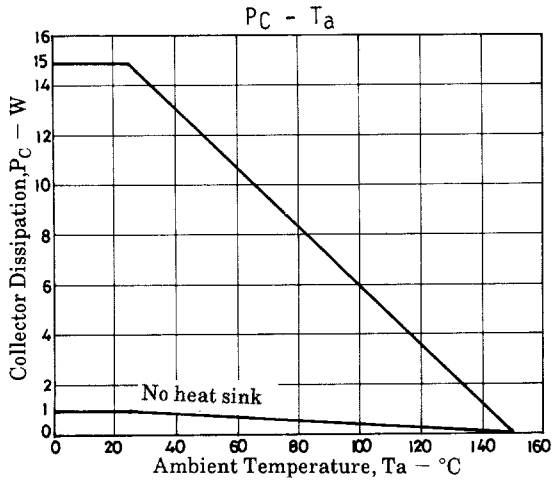
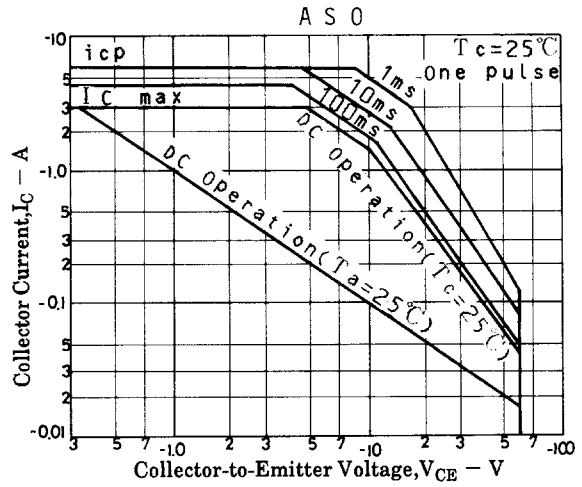
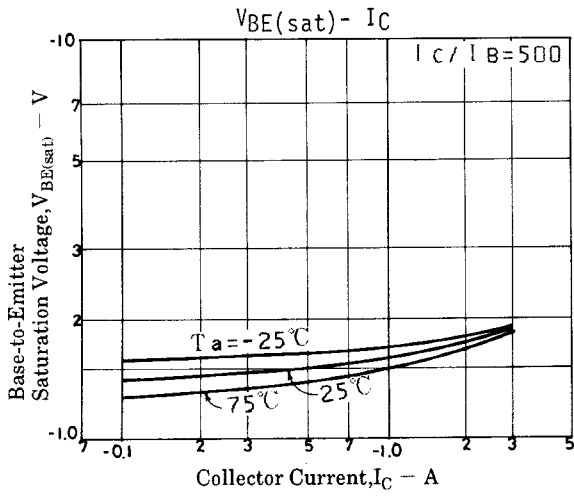
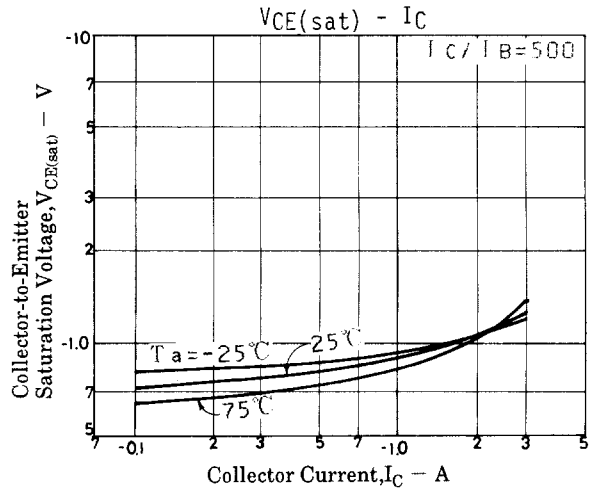
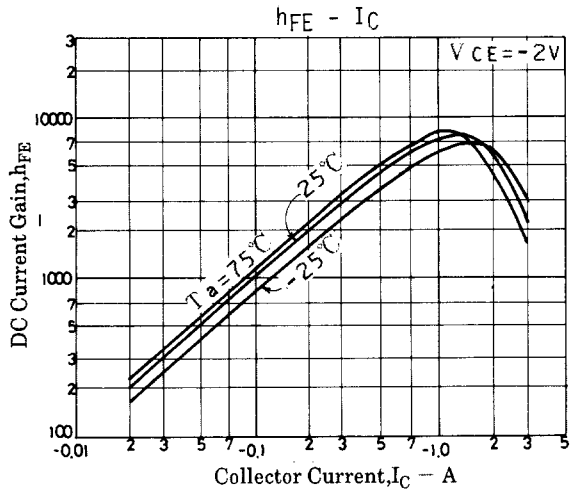
Electrical Connection



Unit (resistance : Ω)



2SB1214



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