



# **Driver Applications**

## **Applications**

· Motor drivers, hammer drivers, relay drivers.

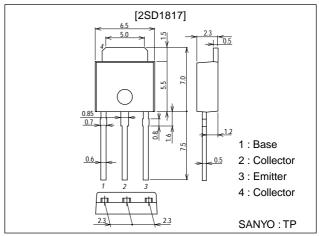
### **Features**

- · High DC current gain.
- · Small and slim package permitting the 2SD1817-applied sets to be made more compact.

## **Package Dimensions**

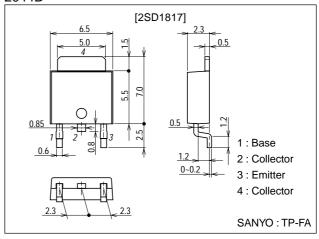
unit:mm

#### 2045B



unit:mm

#### 2044B



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# **Specifications**

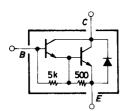
## Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V <sub>CBO</sub>		80	V
Collector-to-Emitter Voltage	VCEO		60	V
Emitter-to-Base Voltage	VEBO		6	V
Collector Current	lС		3	Α
Collector Current (Pulse)	I <sub>CP</sub>		6	Α
Collector Dissipation	PC		1	W
	1.0	Tc=25°C	15	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

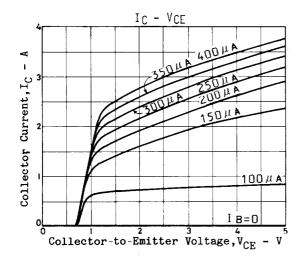
### Electrical Characteristics at Ta = 25°C

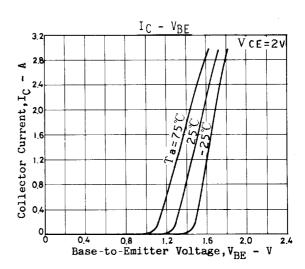
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =60V, I <sub>E</sub> =0			10	μΑ
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			2.5	mA
DC Current Gain	h <sub>FE</sub> 1	V <sub>CE</sub> =2V, I <sub>C</sub> =1A	2000			
De Guiteit Gain	h <sub>FE</sub> 2	V <sub>CE</sub> =2V, I <sub>C</sub> =2A	1000			
Collector-to-Emitter Saturation Voltage	VCE(sat)	I <sub>C</sub> =2A, I <sub>B</sub> =4mA			1.5	V
Base-to-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =2A, I <sub>B</sub> =4mA			2.0	V
Collector-to-Base Breakdown Voltage	V <sub>(BR)</sub> CBO	I <sub>C</sub> =1mA, I <sub>E</sub> =0	80			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I <sub>C</sub> =25mA, R <sub>BE</sub> =∞	60			V

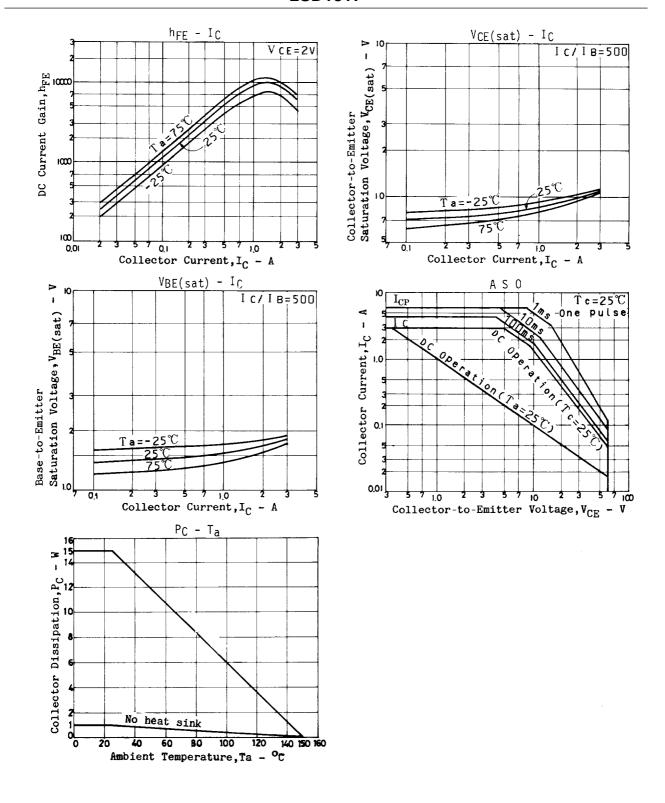
### **Electrical Connection**



Unit (resistance :  $\Omega$ )







### 2SD1817

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