

2SD1854

# **Driver Applications**

### **Applications**

· Motor drivers, hammer drivers, relay drivers.

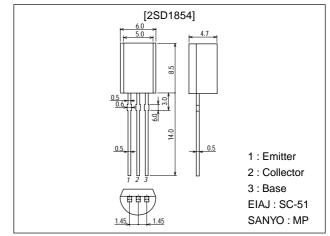
### **Features**

- · High DC current gain.
- · Darlington connection.

## **Package Dimensions**

unit:mm

2006B



### **Specifications**

#### Absolute Maximum Ratings at Ta = 25°C

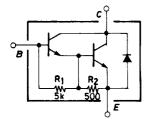
Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V <sub>CBO</sub>		80	V
Collector-to-Emitter Voltage	VCEO		60	V
Emitter-to-Base Voltage	V <sub>EBO</sub>		6	V
Collector Current	I <sub>C</sub>		1.5	Α
Collector Current (Pulse)	I <sub>CP</sub>		3	Α
Collector Dissipation	PC		1	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

#### Electrical Characteristics at Ta = 25°C

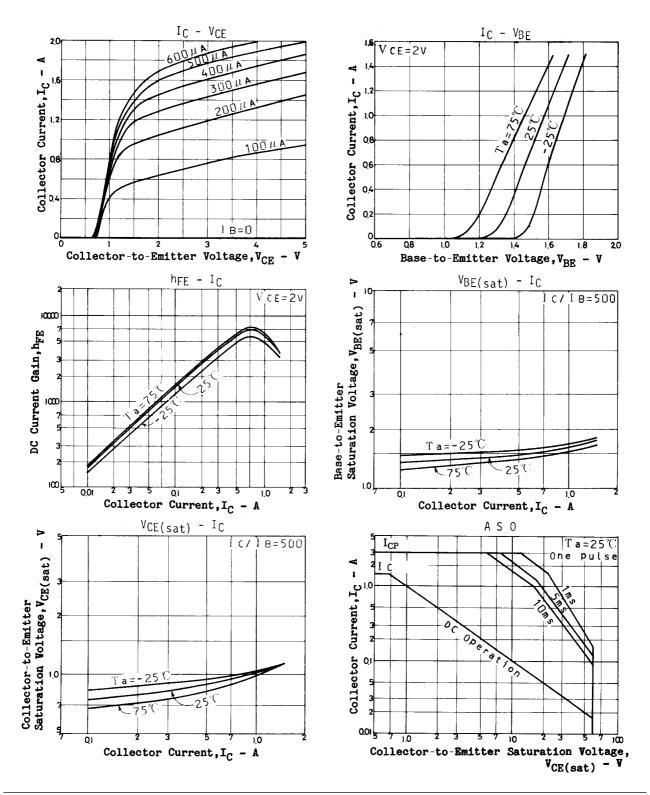
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	ICBO	V <sub>CB</sub> =60V, I <sub>E</sub> =0			10	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			2.5	mA
DC Current Gain	h <sub>FE</sub> 1	V <sub>CE</sub> =2V, I <sub>C</sub> =0.5A	1000			
	h <sub>FE</sub> 2	V <sub>CE</sub> =2V, I <sub>C</sub> =1A	2000			
Collector-to-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =1A, I <sub>B</sub> =2mA			1.5	V
Base-to-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =1A, I <sub>B</sub> =2mA			2.0	V
Collector-to-Base Breakdown Voltage	V <sub>(BR)</sub> CBO	I <sub>C</sub> =1mA	80			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I <sub>C</sub> =25mA	60			V

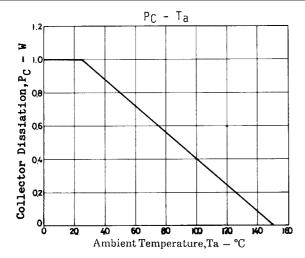
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#### **Electrical Connection**



Unit (resistance :  $\Omega$ )





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