

2SD1800

Driver Applications

Applications

· Relay drivers, hammer drivers, lamp drivers, motor drivers.

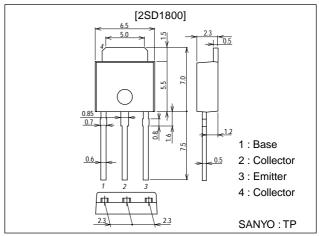
Features

- · High DC current gain (h_{FE}≥4000).
- · Large current capacity.
- · Small and slim package making it easy to make 2SD1800-applied sets smaller.

Package Dimensions

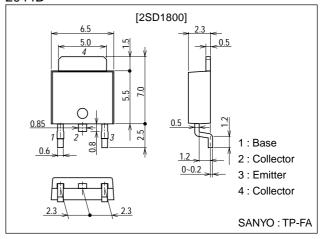
unit:mm

2045B



unit:mm

2044B



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Specifications

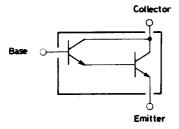
Absolute Maximum Ratings at Ta = 25°C

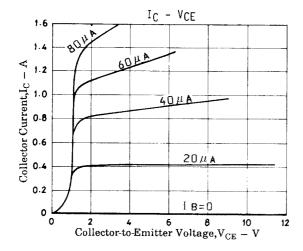
Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{СВО}		80	V
Collector-to-Emitter Voltage	VCEO		50	V
Emitter-to-Base Voltage	VEBO		10	V
Collector Current	IC		1.5	Α
Collector Current (Pulse)	I _{CP}		3	Α
Collector Dissipation	PC		1	W
		Tc=25°C	10	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

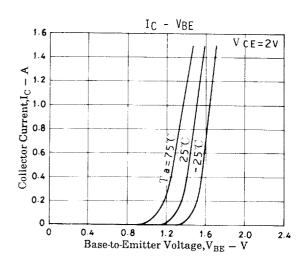
Electrical Characteristics at Ta = 25°C

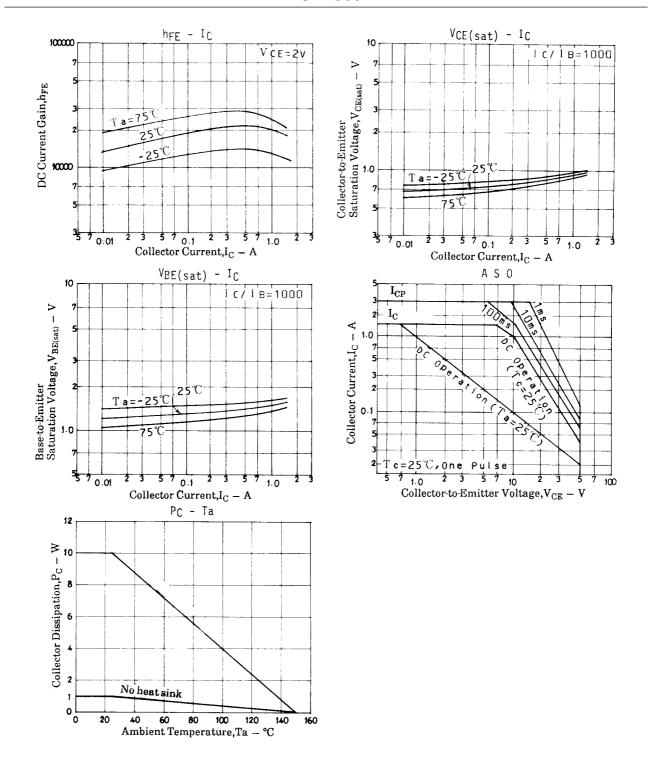
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Collector Cutoff Current	ICBO	V _{CB} =40V, I _E =0			100	nA
Emitter Cutoff Current	I _{EBO}	V _{EB} =8V, I _C =0			100	nA
DC Current Gain	h _{FE} 1	V _{CE} =2V, I _C =500mA	4000			
	h _{FE} 2	V _{CE} =2V, I _C =10mA	3000			
Gain-Bandwidth Product	fT	V _{CE} =10V, I _C =50mA		120		MHz
Collector-to-Emitter Saturation Voltage	VCE(sat)	I _C =500mA, I _B =0.5mA		0.9	1.5	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =500mA, I _B =0.5mA		1.5	2.0	V
Collector-to-Base Breakdown Voltage	V _(BR) CBO	I _C =10μA, I _E =0	80			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I _C =1mA, R _{BE} =∞	50			V
Emitter-to-Base Breakdown Voltage	V(BR)EBO	I _E =10μA, I _C =0	10			V

Electrical Connection









2SD1800

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