

2SD2050

Driver Applications

Applications

· Motor drivers, printer hammer drivers, relay drivers, voltage regulator control.

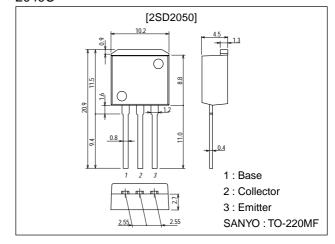
Features

- · Suitable for sets whose height is restricted.
- · High DC current gain.
- · Large current capacity and wide ASO.

Package Dimensions

unit:mm

2049C



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		110	V
Collector-to-Emitter Voltage	VCEO		100	V
Emitter-to-Base Voltage	V _{EBO}		6	V
Collector Current	IC		8	Α
Collector Current (Pulse)	I _{CP}		12	Α
Collector Dissipation	Pc		1.65	W
		Tc=25°C	40	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Collector Cutoff Current	I _{CBO}	V _{CB} =80V, I _E =0			0.1	mA
Emitter Cutoff Current	I _{EBO}	V _{EB} =5V, I _C =0			3.0	mA
DC Current Gain	h _{FE}	V _{CE} =3V, I _C =4A	1500	4000		
Gain-Bandwidth Product	fT	V _{CE} =5V, I _C =4A		20		MHz
Collector-to-Emitter Saturation Voltage	VCE(sat)	I _C =4A, I _B =8mA		0.9	1.5	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =4A, I _B =8mA			2.0	V
Collector-to-Base Breakdown Voltage	V(BR)CBO	I _C =5mA, I _E =0	110			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I _C =50mA, R _{BE} =∞	100			V

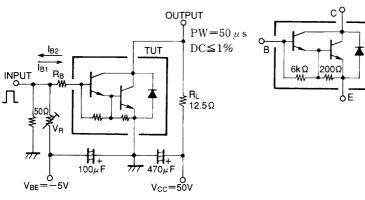
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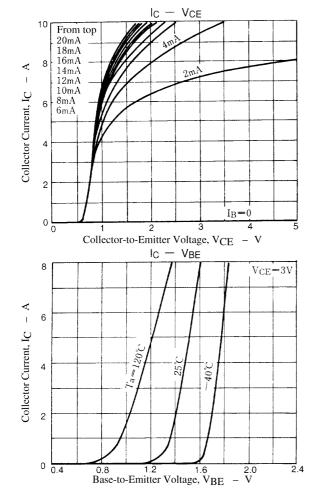
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Turn-ON Time	ton	See specified test circuit.		0.6		μs
Storage Time	t _{stg}	See specified test circuit.		4.8		μs
Fall Time	t _f	See specified test circuit.		1.6		μs

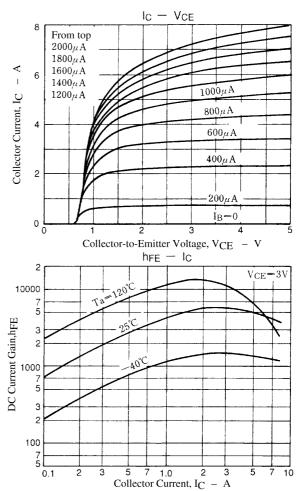
Switching Time Test Circuit

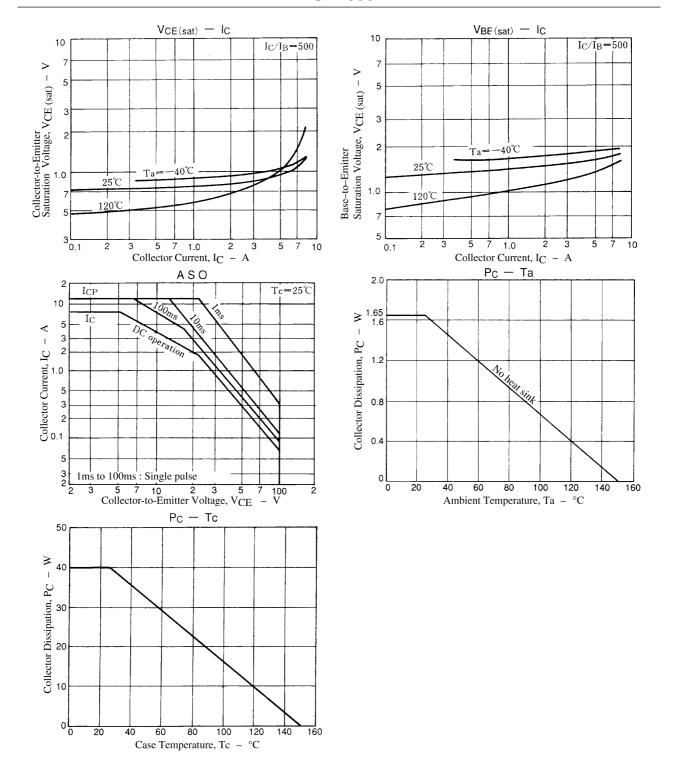
Electrical Connection











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