2SC4030



900V/50mA Switching Applications

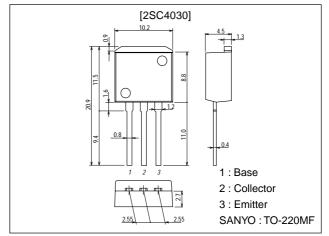
Features

- · High breakdown voltage (V_{CEO} min=900V).
- · Small Output Capacitance (C_{ob} typ=2.0pF).
- · Wide ASO (adoption of MBIT process).
- \cdot High reliability (adoption of HVP process).

Package Dimensions

unit:mm

2049C



Specifications

Absolute Maximum Ratings at Ta = 25°C

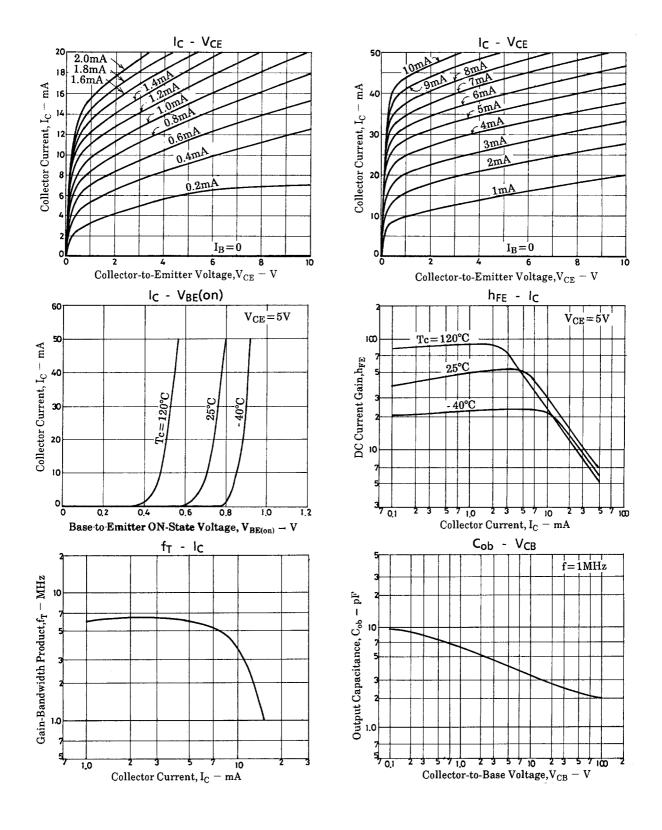
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Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		1700	V
Collector-to-Emitter Voltage	VCEO		900	V
Emitter-to-Base Voltage	V _{EBO}		5	V
Collector Current	IC		50	mA
Collector Current (Pulse)	I _{CP}		150	mA
Collector Dissipation	PC		1.65	W
		Tc=25°C	1.2	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

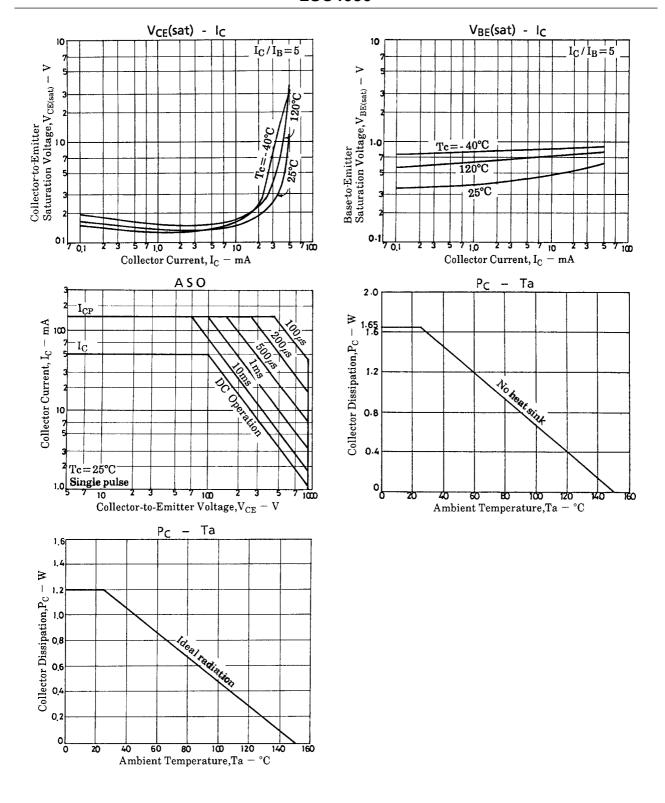
Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Collector Cutoff Current	I _{CBO}	V _{CB} =900V, I _E =0			1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =4V, I _C =0			1	μΑ
DC Current Gain	hFE	V _{CE} =5V, I _C =2mA	20	50	120	
Gain-Bandwidth Product	fT	V _{CE} =10V, I _C =2mA		6		MHz
Collector-to-Emitter Saturation Voltage	VCE(sat)	I _C =5mA, I _B =1mA			5	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =5mA, I _B =1mA			2	V

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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Base Breakdown Voltage	V(BR)CBO	I _C =1mA, I _E =0	1700			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I _C =1mA, R _{BE} =∞	900			V
Emitter-to-Base Breakdown Voltage	V _{(BR)EBO}	$I_E=1$ mA, $I_C=0$	5			V
Output Capacitance	C _{ob}	V _{CB} =100V, f=1MHz		2.0		pF





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