2SA2046

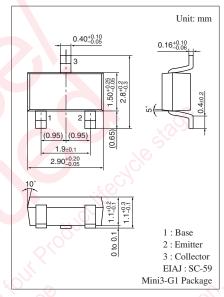
Silicon PNP epitaxial planar type

For DC-DC converter

Features

- \bullet Low collector-emitter saturation voltage $V_{CE(sat)}$
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing.

Absolute Maximum Hatings $T_a = 25 \text{ C}$							
Parameter	Symbol	Rating	Unit				
Collector-base voltage (Emitter open)	V _{CBO}	-30	V				
Collector-emitter voltage (Base open)	V _{CEO}	-20	V				
Emitter-base voltage (Collector open)	V _{EBO}	-5	v				
Collector current	I _C	-1.5	А				
Peak collector current	I _{CP}	-5	А				
Collector power dissipation *	P _C	400	mW				
Junction temperature	Тј	150	°C				
Storage temperature	T _{stg}	-55 to +150	°C				
			~ 0.1				



Absolute Maximum Ratings $T_a = 25^{\circ}C$

Marking Symbol: 3Z

Note) *: Measure on the ceramic substrate at 15 mm \times 15 mm \times 0.6 mm

Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_{\rm C} = -10 \ \mu \text{A}, I_{\rm E} = 0$	-30			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = -1 \text{ mA}, I_{\rm B} = 0$	-20			V
Emitter-base voltage (Collector open)	V _{EBO}	$I_{\rm E} = -10 \ \mu A, I_{\rm C} = 0$	-5			V
Forward current transfer ratio *	h _{FE}	$V_{CE} = -2 V, I_C = -100 mA$	160		560	—
Collector-emitter saturation voltage *	V _{CE(sat)}	$I_{\rm C} = -500 \text{ mA}, I_{\rm B} = -25 \text{ mA}$		-50	-150	mV
Transition frequency	f _T	$V_{CB} = -10 \text{ V}, I_E = 20 \text{ mA}, f = 200 \text{ MHz}$		170		MHz
Collector output capacitance (Common base, input open circuited)	C _{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		25	35	pF

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors. 2. *: Pulse measurement

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