2SC5725

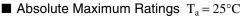
Silicon NPN epitaxial planer type

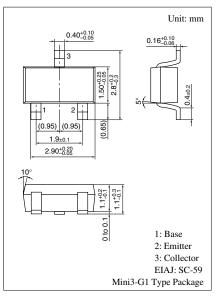
For DC-DC converter

Features

- \bullet Low collector to emitter saturation voltage $V_{\mbox{CE(sat)}}$
- Mini3-G1 type package, allowing downsizing and thinning of the equipment and automatic insertion through the tape packing

The second terminal in that ingo $T_a = 25$ C						
Parameter	Symbol	Rating	Unit			
Collector to base voltage	V _{CBO}	20	V			
Collector to emitter voltage	V _{CEO}	15	V			
Emitter to base voltage	V _{EBO}	5	V			
Peak collector current	I _{CP}	6	А			
Collector current	I _C	2.0	А			
Collector power dissipation *	P _C	600	mW			
Junction temperature	Tj	150	°C			
Storage temperature	T _{stg}	-55 to +150	°C			





Marking Symbol: 3C

Note) *: Measure on the ceramic substrate at $15 \times 15 \times 0.6 \text{ mm}^3$

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector cutoff current	I _{CBO}	$V_{CB} = 10 \text{ V}, I_E = 0$			0.1	μΑ
Collector to base voltage	V _{CBO}	$I_{\rm C} = 10 \ \mu A, \ I_{\rm E} = 0$	20			V
Collector to emitter voltage	V _{CEO}	$I_{\rm C} = 1 \text{ mA}, I_{\rm B} = 0$	15			V
Emitter to base voltage	V _{EBO}	$I_E = 10 \ \mu A, I_C = 0$	5			V
Forward current transfer ratio *	h _{FE1}	$V_{CE} = 2 V, I_C = 100 mA$	200		800	
	h _{FE2}	$V_{CE} = 2 V, I_C = 1.5 A$	120			
Collector to emitter saturation voltage *	V _{CE(sat)}	$I_{\rm C} = 0.5 \text{ A}, I_{\rm B} = 25 \text{ mA}$		40	100	mV
		$I_{\rm C} = 1.5 \text{ A}, I_{\rm B} = 30 \text{ mA}$		130	280	mV
Collector output capacitance	C _{ob}	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		15	25	pF
Transition frequency	f _T	$V_{CB} = 10 \text{ V}, I_E = -50 \text{ mA}, f = 200 \text{ MHz}$		280		MHz

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

Note) *: Pulse measurement

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