

# 2SC5885

Silicon NPN triple diffusion mesa type

Horizontal deflection output for TV, CRT monitor

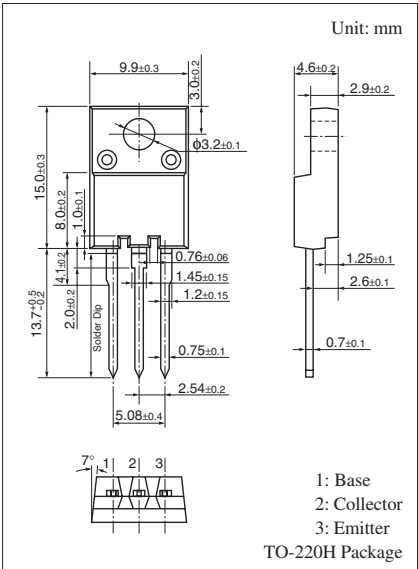
## ■ Features

- High breakdown voltage:  $V_{CBO} \geq 1\,500\text{ V}$
- Wide safe operation area
- Built-in dumper diode

## ■ Absolute Maximum Ratings $T_C = 25^\circ\text{C}$

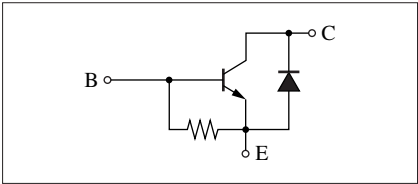
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	1 500	V
Collector-emitter voltage (E-B short)	V <sub>CES</sub>	1 500	V
Emitter-base voltage (Collector open)	V <sub>EBO</sub>	5	V
Base current	I <sub>B</sub>	3	A
Collector current	I <sub>C</sub>	6	A
Peak collector current *	I <sub>CP</sub>	9	A
Collector power dissipation	P <sub>C</sub>	30	W
		2	
T <sub>a</sub> = 25°C			
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	−55 to +150	°C

Note) \*: Non-repetitive peak collector current



Marking Symbol: C5885

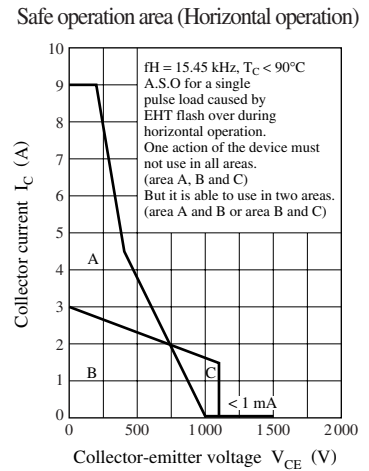
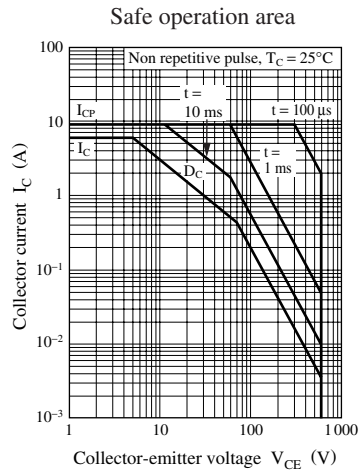
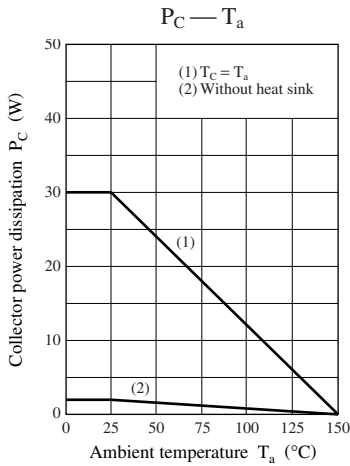
Internal Connection



## ■ Electrical Characteristics $T_C = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = 500\text{ mA}, I_C = 0$	5			V
Forward voltage	$V_F$	$I_F = 3\text{ A}$			-2	V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = 1\,000\text{ V}, I_E = 0$			50	$\mu\text{A}$
		$V_{CB} = 1\,500\text{ V}, I_E = 0$			1	mA
Forward current transfer ratio	$h_{FE}$	$V_{CE} = 5\text{ V}, I_C = 3\text{ A}$	5		10	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 3\text{ A}, I_B = 0.75\text{ A}$			2.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 3\text{ A}, I_B = 0.75\text{ A}$			1.5	V
Transition frequency	$f_T$	$V_{CE} = 10\text{ V}, I_C = 0.1\text{ A}, f = 0.5\text{ MHz}$		3		MHz
Storage time	$t_{stg}$	$I_C = 3\text{ A}, \text{Resistance loaded}$			5.0	$\mu\text{s}$
Fall time	$t_f$	$I_{B1} = 0.75\text{ A}, I_{B2} = -1.5\text{ A}$			0.5	$\mu\text{s}$

Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.



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