

2SC5583

Silicon NPN triple diffusion mesa type

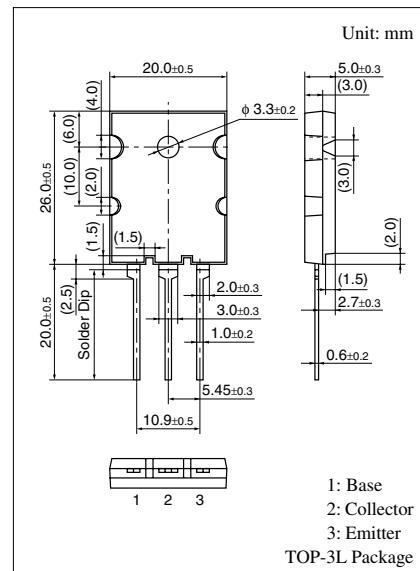
For horizontal deflection output

■ Features

- High breakdown voltage, and high reliability through the use of a glass passivation layer
- High-speed switching
- Wide area of safe operation (ASO)

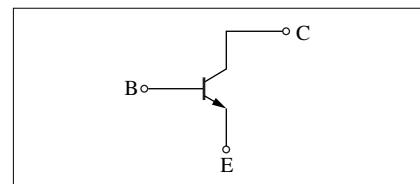
■ Absolute Maximum Ratings $T_C = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	1 500	V
Collector to emitter voltage	V_{CES}	1 500	V
	V_{CEO}	600	V
Emitter to base voltage	V_{EBO}	7	V
Peak collector current	I_{CP}	30	A
Collector current	I_C	17	A
Base current	I_B	8	A
Collector power dissipation	P_C	150	W
		3	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$



Marking Symbol: C5583

Internal Connection



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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 1\,000\text{ V}, I_E = 0$			50	μA
		$V_{CB} = 1\,500\text{ V}, I_E = 0$			1	mA
Emitter cutoff current	I_{EBO}	$V_{EB} = 7\text{ V}, I_C = 0$			50	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = 5\text{ V}, I_C = 8.5\text{ A}$	6		12	
Collector to emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C = 8.5\text{ A}, I_B = 2.13\text{ A}$			3	V
Base to emitter saturation voltage	$V_{BE(\text{sat})}$	$I_C = 8.5\text{ A}, I_B = 2.13\text{ A}$			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}	$I_C = 8.5\text{ A}, \text{Resistance loaded}$ $I_{B1} = 2.13\text{ A}, I_{B2} = -4.25\text{ A}$			2.7	μs
Fall time	t_f				0.2	μs