

# 2SC5584

## Silicon NPN triple diffusion mesa type

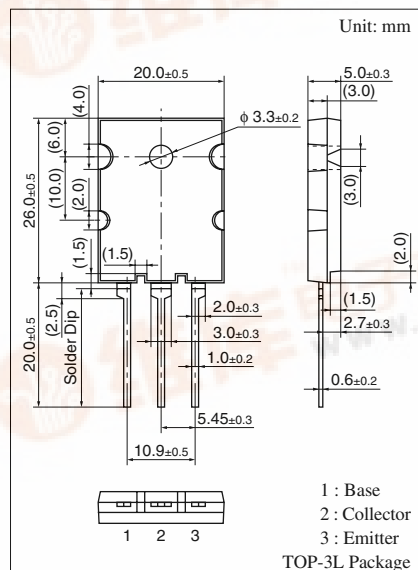
For horizontal deflection output

## ■ Features

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

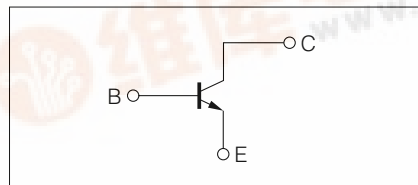
■ Absolute Maximum Ratings  $T_C = 25^\circ\text{C}$

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		$I_C$	20	A
Base current		$I_B$	8	A
Collector power dissipation	$T_C = 25^\circ\text{C}$	$P_C$	150	W
	$T_a = 25^\circ\text{C}$		3.5	
Junction temperature		$T_j$	150	$^\circ\text{C}$
Storage temperature		$T_{stg}$	-55 to +150	$^\circ\text{C}$



Marking Symbol: C5584

## Internal Connection



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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = 1\ 000\ V, I_E = 0$			50	$\mu A$
		$V_{CB} = 1\ 500\ V, I_E = 0$			1	mA
Emitter cutoff current	$I_{EBO}$	$V_{EB} = 7\ V, I_C = 0$			50	$\mu A$
Forward current transfer ratio	$h_{FE}$	$V_{CE} = 5\ V, I_C = 10\ A$	7		14	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10\ A, I_B = 2.5\ A$			3	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = 10\ A, I_B = 2.5\ A$			1.5	V
Transition frequency	$f_T$	$V_{CE} = 10\ V, I_C = 0.1\ A, f = 0.5\ MHz$		3		MHz
Storage time	$t_{stg}$	$I_C = 10\ A, \text{ Resistance loaded}$ $I_{B1} = 2.5\ A, I_{B2} = -5.0\ A$			2.7	$\mu s$
Fall time	$t_f$				0.2	$\mu s$

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