

# 2SC5553

Silicon NPN triple diffusion mesa type

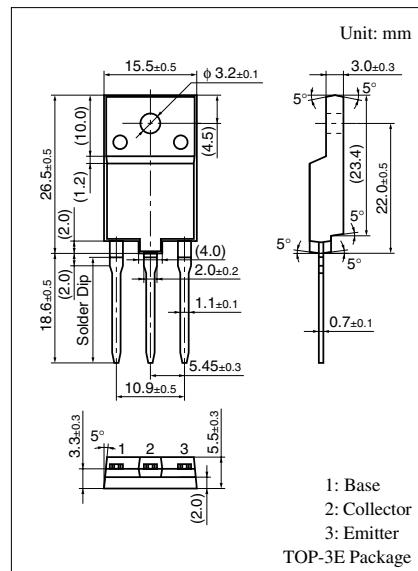
For horizontal deflection output

## ■ Features

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

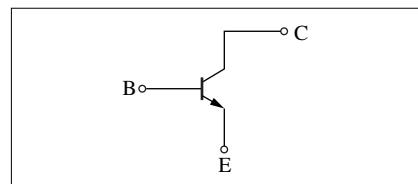
## ■ Absolute Maximum Ratings $T_C = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector to base voltage	$V_{CBO}$	1 700	V
Collector to emitter voltage	$V_{CES}$	1 700	V
	$V_{CEO}$	600	V
Emitter to base voltage	$V_{EBO}$	7	V
Peak collector current	$I_{CP}$	30	A
Collector current	$I_C$	22	A
Base current	$I_B$	11	A
Collector power dissipation	$P_C$	70	W
		3.5	
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$



Marking Symbol: C5553

## 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	$\mu\text{A}$
		$V_{CB} = 1\ 700\text{ V}, I_E = 0$			1	mA
Emitter cutoff current	$I_{EBO}$	$V_{EB} = 7\text{ V}, I_C = 0$			50	$\mu\text{A}$
Forward current transfer ratio	$h_{FE}$	$V_{CE} = 5\text{ V}, I_C = 11\text{ A}$	6		12	
Collector to emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C = 11\text{ A}, I_B = 2.75\text{ A}$			3	V
Base to emitter saturation voltage	$V_{BE(\text{sat})}$	$I_C = 11\text{ A}, I_B = 2.75\text{ A}$			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	$t_{stg}$	$I_C = 11\text{ A}$ , Resistance loaded $I_{B1} = 2.75\text{ A}, I_{B2} = -5.5\text{ A}$			3.0	$\mu\text{s}$
Fall time	$t_f$				0.2	$\mu\text{s}$

