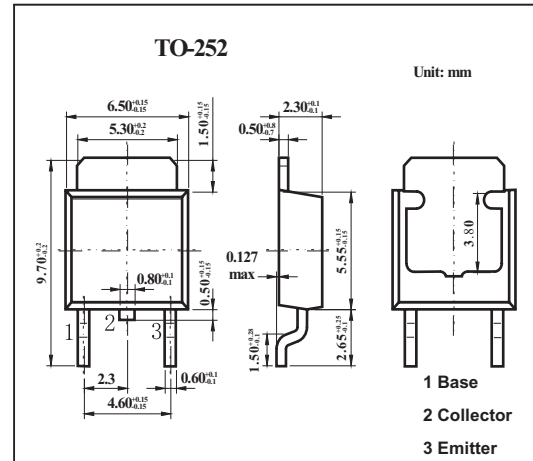


## Silicon NPN Triple Diffused Mesa Type

## 2SC5355

## ■ Features

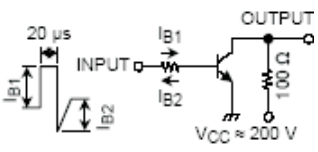
- Excellent switching times:  $t_r = 0.5 \mu\text{s}$  (max),  $t_f = 0.3 \mu\text{s}$  (max)
- High collector breakdown voltage:  $V_{CE0} = 400 \text{ V}$
- High DC current gain:  $h_{FE} = 20$  (min)

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	600	V
Collector-emitter voltage	$V_{CE0}$	400	V
Emitter-base voltage	$V_{EB0}$	7	V
Collector current (DC)	$I_C$	5	A
Collector current (Pulse)	$I_{CP}$	7	
Base current	$I_B$	1	A
Collector power dissipation	$P_C$	$T_a = 25^\circ\text{C}$	1.5
		$T_C = 25^\circ\text{C}$	25
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55 to +150	$^\circ\text{C}$

## 2SC5355

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cut-off current	$I_{CBO}$	$V_{CB} = 480\text{ V}, I_E = 0$			100	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 7\text{ V}, I_C = 0$			10	$\mu\text{A}$
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 1\text{ mA}, I_E = 0$	600			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10\text{ mA}, I_B = 0$	400			V
DC current gain	$h_{FE}$	$V_{CE} = 5\text{ V}, I_C = 1\text{ mA}$	12			
		$V_{CE} = 5\text{ V}, I_C = 0.5\text{ A}$	20		65	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 2\text{ A}, I_B = 0.25\text{ A}$			1.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 2\text{ A}, I_B = 0.25\text{ A}$			1.3	V
Switching time Rise time	$t_r$	 <p><math>I_{B1} = 0.25\text{ A}, I_{B2} = -0.5\text{ A}</math> DUTY CYCLE <math>\leq 1\%</math></p>			0.5	$\mu\text{s}$
Switching time Storage time	$t_{stg}$				2.0	
Switching time Fall time	$t_f$				0.3	

## ■ Marking

Marking	C5355
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