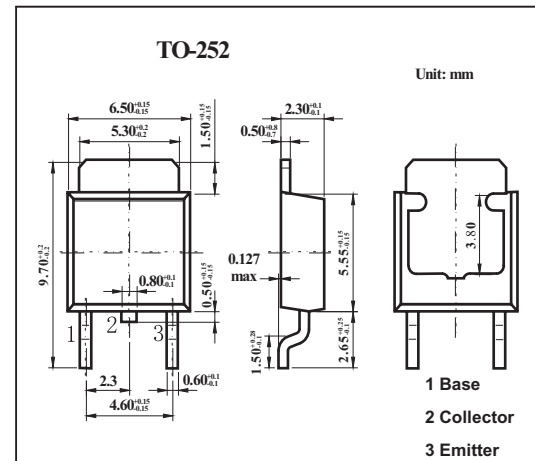


## Silicon NPN Triple Diffused Type

## 2SC5356

## ■ Features

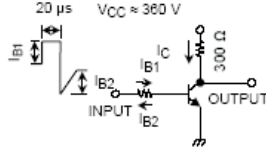
- Excellent switching times:  $t_r = 0.5 \mu\text{s}$  (max) ( $I_c = 1.2 \text{ A}$ )
- High collectors breakdown voltage:  $V_{CE0} = 800 \text{ V}$
- High DC current gain:  $h_{FE} = 15$  (min) ( $I_c = 0.15 \text{ A}$ )

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	900	V
Collector-emitter voltage	$V_{CEO}$	800	V
Emitter-base voltage	$V_{EBO}$	7	V
Collector current (DC)	$I_c$	3	A
Collector current (Pulse)	$I_{cP}$	5	
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	$^\circ\text{C}$

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## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = 720 V, I <sub>E</sub> = 0			100	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 7 V, I <sub>C</sub> = 0			10	μA
Collector-base breakdown voltage	V <sub>(BR) CBO</sub>	I <sub>C</sub> = 1 mA, I <sub>E</sub> = 0	900			V
Collector-emitter breakdown voltage	V <sub>(BR) CEO</sub>	I <sub>C</sub> = 10 mA, I <sub>B</sub> = 0	800			V
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 5 V, I <sub>C</sub> = 1 mA	10			
		V <sub>CE</sub> = 5 V, I <sub>C</sub> = 0.15 A	15			
Collector-emitter saturation voltage	V <sub>CE (sat)</sub>	I <sub>C</sub> = 1.2 A, I <sub>B</sub> = 0.24 A			1.0	V
Base-emitter saturation voltage	V <sub>BE (sat)</sub>	I <sub>C</sub> = 2 A, I <sub>B</sub> = 0.24 A			1.3	V
Switching time Rise time	t <sub>r</sub>	 <p>I<sub>B1</sub> = 0.24 A, I<sub>B2</sub> = -0.48 A DUTY CYCLE ≤ 1%</p>			0.7	μs
Switching time Storage time	t <sub>stg</sub>				4.0	
Switching time Fall time	t <sub>f</sub>				0.5	

## ■ Marking

Marking	C5356
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