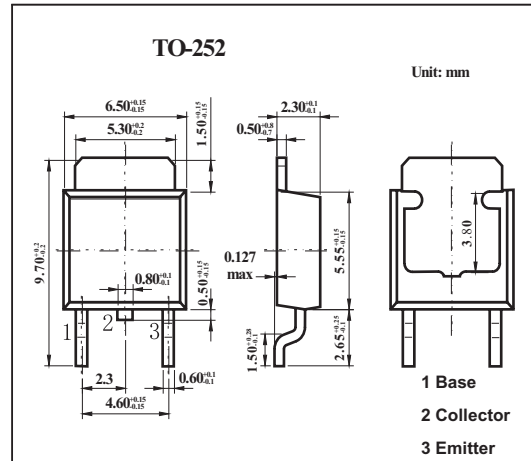


■ Features

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



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

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

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cut-off current	ICBO	V <sub>CB</sub> = 480 V, I <sub>E</sub> = 0			100	μA
Emitter cut-off current	IEBO	V <sub>EB</sub> = 7 V, I <sub>C</sub> = 0			10	μA
Collector-base breakdown voltage	V (BR) CBO	I <sub>C</sub> = 1 mA, I <sub>E</sub> = 0	600			V
Collector-emitter breakdown voltage	V (BR) CEO	I <sub>C</sub> = 10 mA, I <sub>B</sub> = 0	400			V
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 5 V, I <sub>C</sub> = 1 mA	12			
		V <sub>CE</sub> = 5 V, I <sub>C</sub> = 0.5 A	20		65	
Collector-emitter saturation voltage	V <sub>CE (sat)</sub>	I <sub>C</sub> = 2 A, I <sub>B</sub> = 0.25 A			1.0	V
Base-emitter saturation voltage	V <sub>BE (sat)</sub>	I <sub>C</sub> = 2 A, I <sub>B</sub> = 0.25 A			1.3	V
Switching time Rise time	t <sub>r</sub>	<p>I<sub>B1</sub> = 0.25 A, I<sub>B2</sub> = -0.5 A DUTY CYCLE ≤ 1%</p>			0.5	μs
Switching time Storage time	t <sub>stg</sub>				2.0	
Switching time Fall time	t <sub>f</sub>				0.3	

■ Marking

Marking	C5355
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