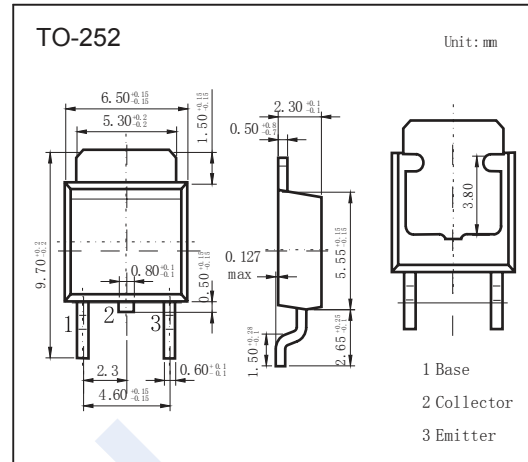


NPN Transistors

2SC5548A

■ Features

- High speed switching
- High collector breakdown voltage
- High DC current gain

■ 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		
Emitter - Base Voltage	V_{EB0}	7		
Collector Current - Continuous	I_C	2	A	
Collector Current - Pulse	I_{CP}	4		
Base Current	I_B	0.5	W	
Collector Power Dissipation	P_C	$T_a = 25^\circ\text{C}$		1
		$T_c = 25^\circ\text{C}$		15
Junction Temperature	T_J	150	$^\circ\text{C}$	
Storage Temperature Range	T_{stg}	-55 to 150		

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = 1\text{ mA}, I_E = 0$	600			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = 10\text{ mA}, I_B = 0$	400			
Emitter - base breakdown voltage	V_{EB0}	$I_E = 1\text{ mA}, I_C = 0$	7			
Collector-base cut-off current	I_{CB0}	$V_{CB} = 480\text{ V}, I_E = 0$			20	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = 7\text{ V}, I_C = 0$			10	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 800\text{ mA}, I_B = 100\text{ mA}$			1	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 800\text{ mA}, I_B = 100\text{ mA}$			1.3	
DC current gain	h_{FE}	$V_{CE} = 5\text{ V}, I_C = 1\text{ mA}$	20			
		$V_{CE} = 5\text{ V}, I_C = 200\text{ mA}$	40		100	
Turn On Time	t_{on}	<p>$I_{B1} = 0.1\text{ A}, I_{B2} = -0.2\text{ A}$ DUTY CYCLE $\leq 1\%$</p>			0.5	μs
Storage Time	t_{stg}				3	
Fall Time	t_f				0.3	

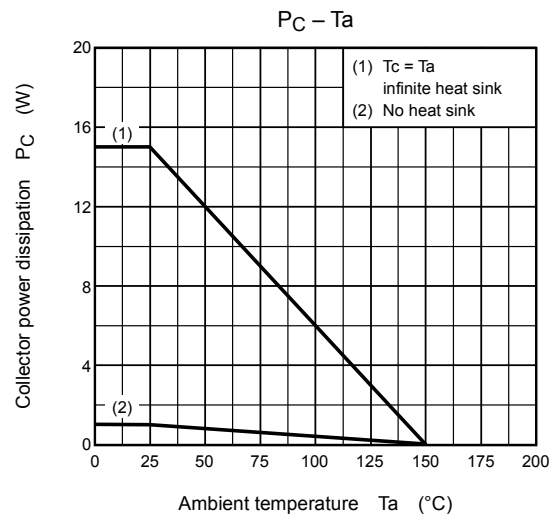
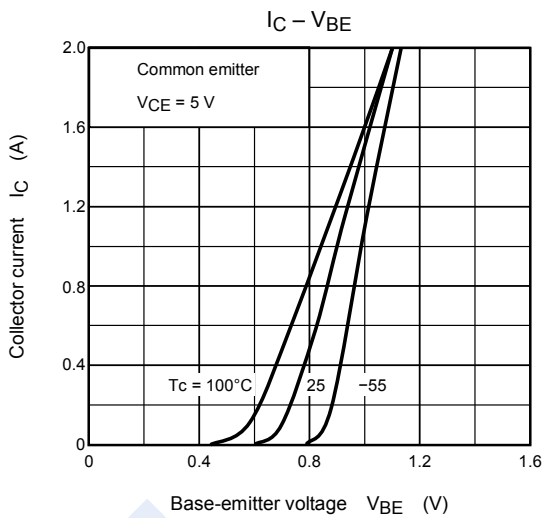
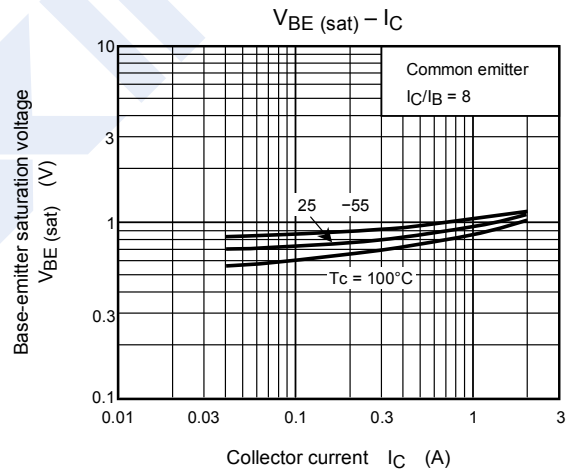
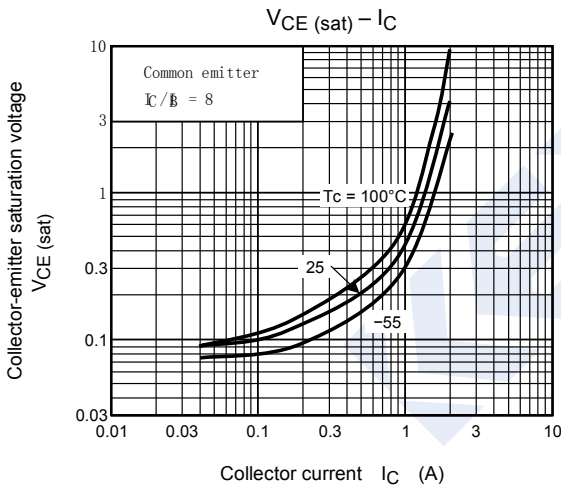
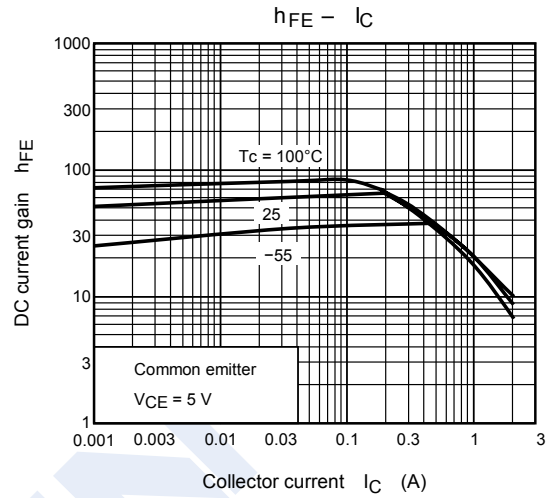
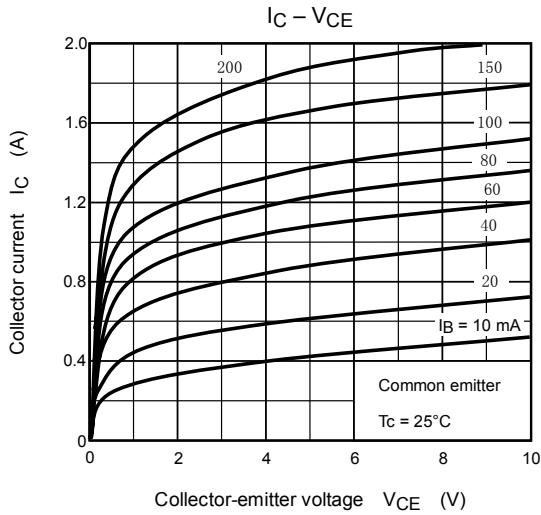
■ Marking

Marking	C5548A
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NPN Transistors

2SC5548A

Typical Characteristics



NPN Transistors

2SC5548A

Typical Characteristics

