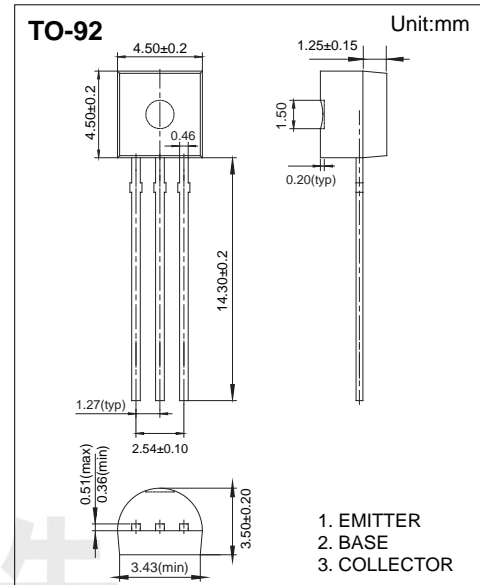


NPN Transistors 2N5551

■ Features

- Collector current: $I_c=0.6A$
- General Purpose Switching Application



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	180	V
Collector - Emitter Voltage	V_{CE0}	160	
Emitter - Base Voltage	V_{EB0}	6	
Collector Current - Continuous	I_c	0.6	A
Collector Power Dissipation	P_c	625	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	200	$^\circ C/W$
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to 150	

Transistor

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■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = 100 μA, I _E =0	180			V
Collector- emitter breakdown voltage	V _{CE0}	I _c = 1 mA, I _B =0	160			
Emitter - base breakdown voltage	V _{EB0}	I _E = 100 μA, I _c =0	6			
Collector cut-off current	I _{CB0}	V _{CB} = 120 V, I _E =0			50	nA
Emitter cut-off current	I _{EB0}	V _{EB} = 4V, I _c =0			50	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =10 mA, I _B = 1mA			0.15	V
		I _c =50 mA, I _B = 5mA			0.2	
Base - emitter saturation voltage	V _{BE(sat)}	I _c =10 mA, I _B = 1mA			1	
		I _c =50 mA, I _B = 5mA			1	
DC current gain	h _{FE(1)}	V _{CE} = 5V, I _c = 1mA	80			
	h _{FE(2)}	V _{CE} = 5V, I _c = 10mA	80		300	
	h _{FE(3)}	V _{CE} = 5V, I _c = 50mA	50			
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz			6	pF
Emitter input capacitance	C _{ib}	V _{BE} =0.5V, I _c =0, f=1MHz			20	
Transition frequency	f _t	V _{CE} = 10V, I _c = 10mA, f=100MHz	100		300	MHz

■ Classification of h_{FE(2)}

Rank		A	B	C
Range	80-100	100-150	150-200	200-300

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■ Typical Characteristics

