Transistors 2N5551

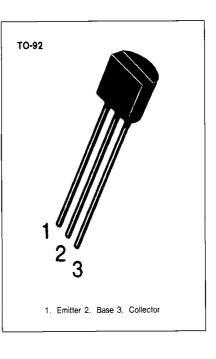


AMPLIFIER TRANSISTOR

- Collector-Emitter Voltage: V_{CEO} = 160V
- Collector Dissipation: Pc(max)=625mW

Characteristic	Symbol	Rating	Unit V	
Collector-Base Voltage	V _{CBO}	180		
Collector-Emitter Voltage	V _{CEO}	160	V	
Emitter-Base Voltage	VEBO	6	V	
Collector Current	I _c	600	mA	
Collector Dissipation	Pc	625	mW	
Junction Temperature	Tj	150	•C	
Storage Temperature	Tstg	-55~150	•C	





ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Characteristic	Symbol	Test Conditions	Min	Тур	Max	Unit
Collector-Base Breakdown Voltage	BV _{CBO}	$l_{\rm C} = 100 \mu {\rm A}, \ l_{\rm E} = 0$	180			v
*Collector-Emitter Breakdown Voltage	BVCEO	$I_{\rm C} = 1 {\rm mA}, I_{\rm B} = 0$	160			V I
Emitter-Base Breakdown Voltage	BVEBO	$I_{\rm E} = 10 \mu A$, $I_{\rm C} = 0$	6			V
Collector Cut-off Current	I _{CBO}	$V_{CB} = 120V, I_E = 0$			50	nA
Emitter Cut-off Current	I _{EBO}	$V_{BE} = 4V, I_{C} = 0$	ł		50	nA
*DC Current Gain	h _{FE}	$I_{\rm C} = 1$ mA, $V_{\rm CE} = 5$ V	80			
		$I_{c} = 10 \text{mA}, V_{cF} = 5 \text{V}$	80		250	1
		$l_{c} = 50 \text{mA}, V_{CE} = 5 \text{V}$	30			ļ
*Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_{\rm C} = 10$ mA, $I_{\rm B} = 1$ mA			0.15	V V
		$I_c = 50 \text{mA}, I_B = 5 \text{mA}$			0.2	V
*Base-Emitter Saturation Voltage	V _{BE} (sat)	$I_{\rm C}$ = 10mA, $I_{\rm B}$ = 1mA			1	V
	, ,	$l_c = 50 \text{mA}, l_B = 5 \text{mA}$			1	V
Current Gain Bandwidth Product	fT	$I_{c} = 10 \text{mA}, V_{ce} = 10 \text{V}$ f=100MHz	100		300	MHz
Output Capacitance	Cob	$V_{CB} = 10V, I_E = 0$ f=1MHz			6	pF
Noise Figure	NF	$I_{c} = 250 \mu A, V_{CE} = 5V$ $R_{s} = 1K\Omega$ f = 10Hz to 15.7KHz			8	dB

*Pulse Test: Pulse Width=300µS, Duty Cycle=2%



