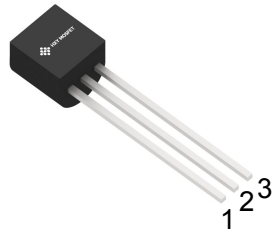
2N5550TFR
NPN Plastic-Encapsulate Transistors

Features

- General Purpose Switching Application

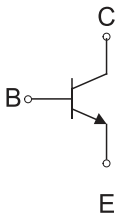
1. EMITTER
2. BASE
3. COLLECTOR



TO-92

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
2N5550TFR	TO-92	2N5551	1000



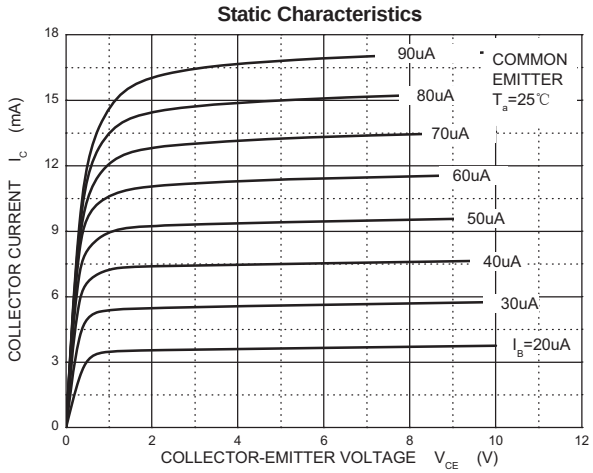
Maximum Ratings (Ta=25℃ unless otherwise noted)

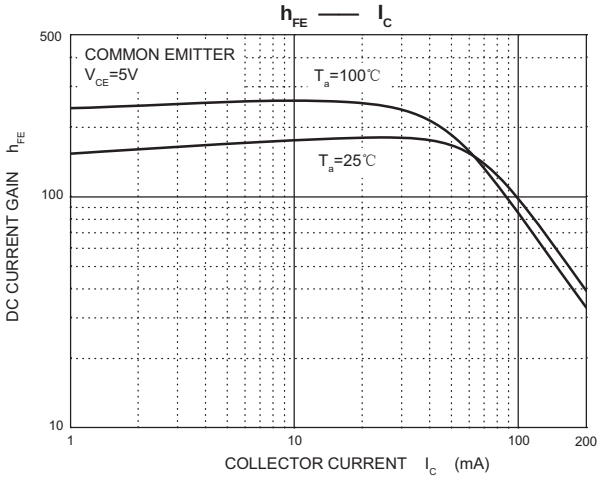
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	180	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	0.6	A
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

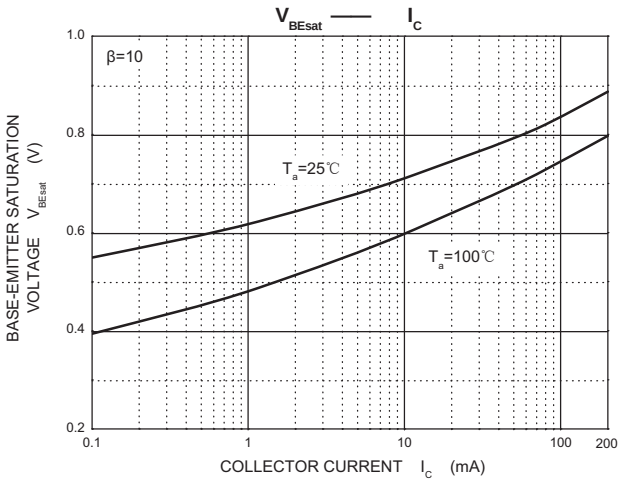
Electrical Characteristics (Ta=25℃ unless otherwise specified)

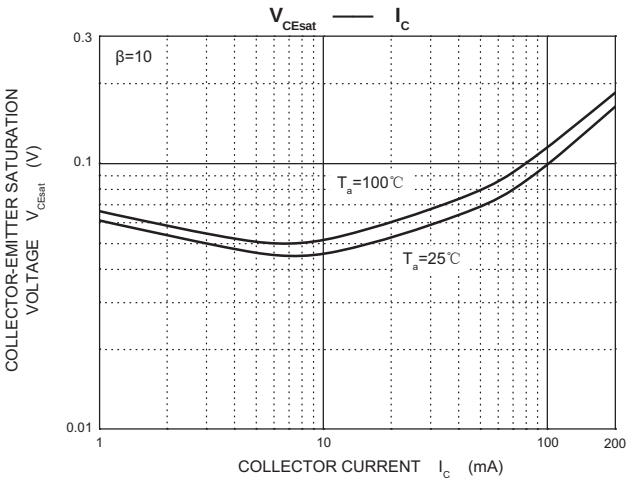
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	180			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$*	I_C=1mA,I_B=0	160			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10μA,I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=120V,I_E=0			50	nA
Emitter cut-off current	I_{EBO}	V_{EB}=4V,I_C=0			50	nA
DC current gain	$h_{FE(1)}$	V_{CE}=5V, I_C=1mA	80			
	$h_{FE(2)}$	V_{CE}=5V, I_C=10mA	100		200	
	$h_{FE(3)}$	V_{CE}=5V, I_C=50mA	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$(1)	I_C=10mA,I_B=1mA			0.15	V
	$V_{CE(sat)}$(2)	I_C=50mA,I_B=5mA			0.2	V
Base-emitter saturation voltage	$V_{BE(sat)}$(1)	I_C=10mA,I_B=1mA			1	V
	$V_{BE(sat)}$(2)	I_C=50mA,I_B=5mA			1	V
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	pF
Transition frequency	f_T	V_{CE}=10V,I_C=10mA, f=100MHz	100		300	MHz

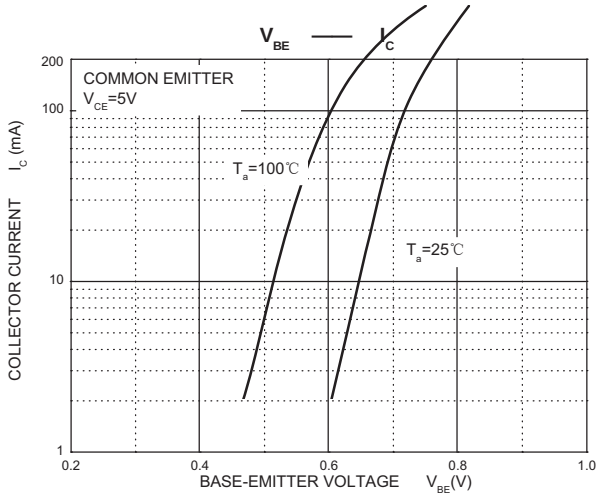
Typical Characteristics

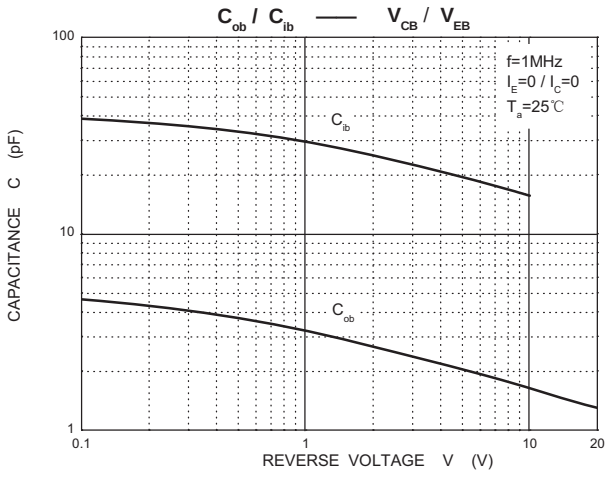


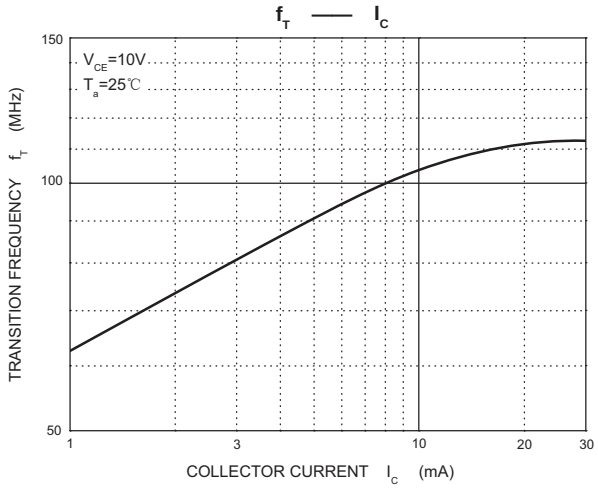


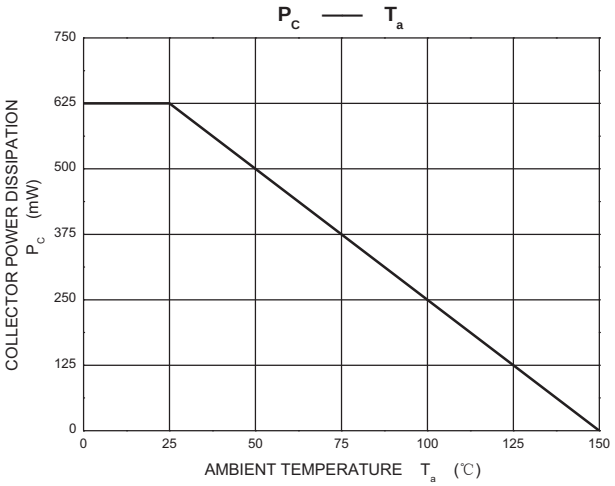




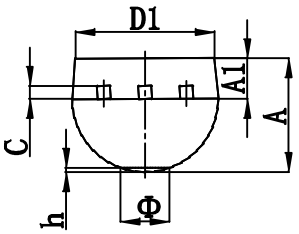


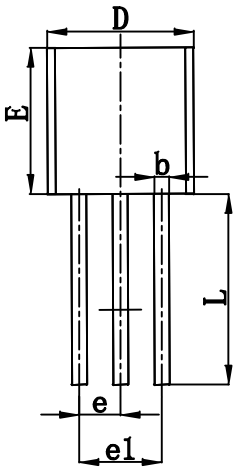






TO-92 Package Outline Dimensions





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.300	4.700	0.169	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270 TYP		0.050 TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

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