

## TO-92 Plastic-Encapsulate Transistors

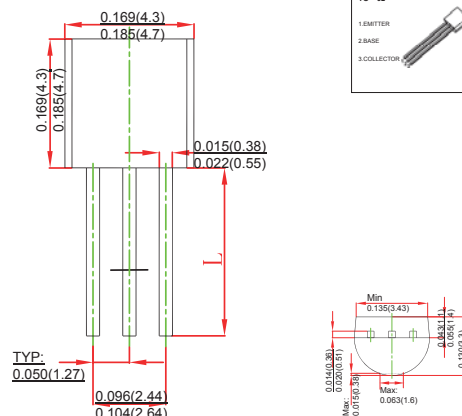
### FEATURES

- Switching and Amplification in High Voltage
- Applications such as Telephony
- Low Current(Max. 600mA)
- High Voltage(Max. 160V)
- TRANSISTOR (NPN)

### MECHANICAL DATA

- Case style:TO-92 molded plastic
- Mounting position:any

### TO-92



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	160	V
$V_{CEO}$	Collector-Emitter Voltage	140	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current -Continuous	0.6	A
$P_C$	Collector Power Dissipation	0.625	W
$T_j$	Junction Temperature	150	°C
$T_{stg}$	Storage Temperature	-55-150	°C

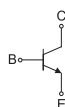
### ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2N5550	TO-92	Bulk	1000pcs/Bag
2N5550-TA	TO-92	Tape	2000pcs/Box

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100 \mu A, I_E=0$	160			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	140			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10 \mu A, I_C=0$	6			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=100V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=4V, I_C=0$			0.05	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE}=5V, I_C=1mA$	60			
	$h_{FE(2)}$	$V_{CE}=5V, I_C=10mA$	60		250	
	$h_{FE(3)}$	$V_{CE}=5V, I_C=50mA$	20			
Collector-emitter saturation voltage	$V_{CEsat}$	$I_C=10mA, I_B=1mA$ $I_C=50mA, I_B=5mA$			0.15 0.25	V
Base-emitter saturation voltage	$V_{BEsat}$	$I_C=10mA, I_B=1mA$ $I_C=50mA, I_B=5mA$			1 1.2	V
Transition frequency	$f_T$	$V_{CE}=10V, I_C=10mA, f=100MHz$	100		300	MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$			6	pF
Noise figure	NF	$V_{CE}=5V, I_C=0.25mA, f=1KHz, R_s=1k\Omega$			10	dB

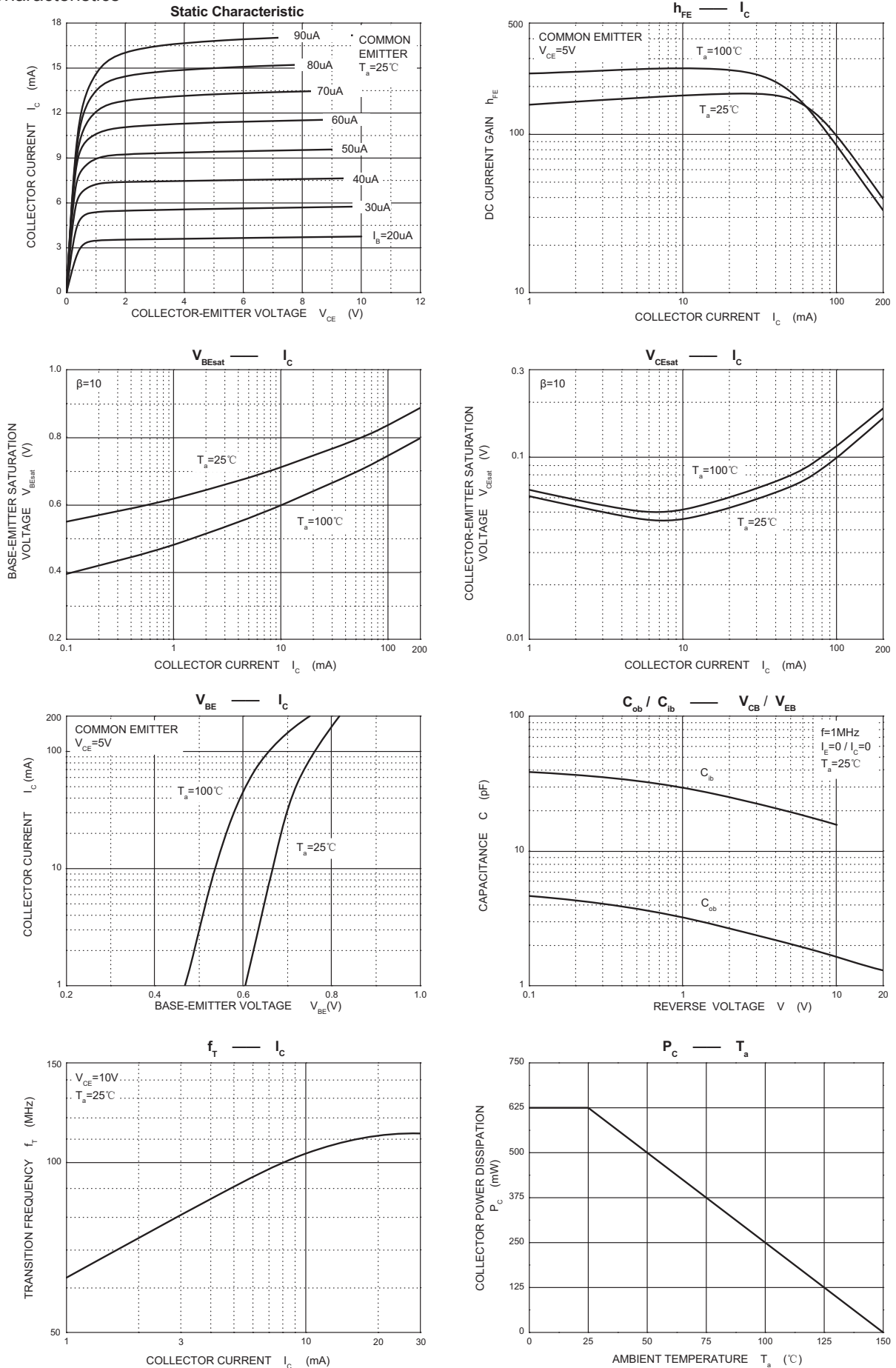
### MARKING

2N5550=Device code  
 Solid dot=Green molding compound device,  
 if none, the normal device  
 XXX=Code

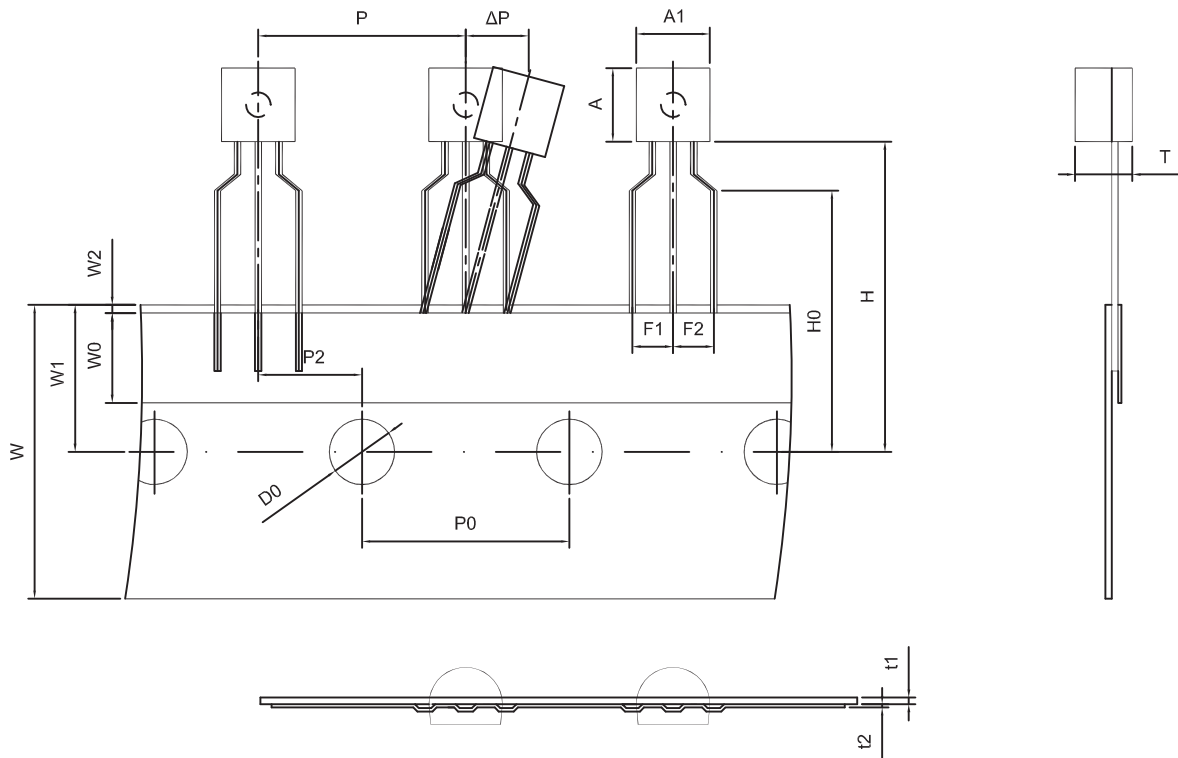


# RATINGS AND CHARACTERISTIC CURVES

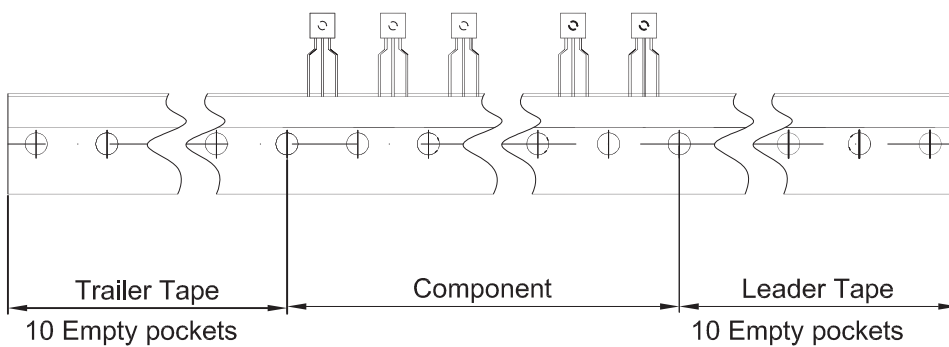
## Typical Characteristics



TO-92 PACKAGE TAPEING DIMENSION



Dimensions are in millimeter								
A1	A	T	P	P0	P2	F1	F2	W
4.5	4.5	3.5	12.7	12.7	6.35	2.5	2.5	18.0
W0	W1	W2	H	H0	D0	t1	t2	ΔP
6.0	9.0	1.0 MAX.	19.0	16.0	4.0	0.4	0.2	0



Package	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92	2000 pcs	333×162×43	20,000 pcs	350×340×250