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**Micro Commercial Components** 

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# 2N5550

# NPN Plastic Encapsulate Transistor

# TO-92 C C STRAIGHT LEAD BENT LEAD BULK PACK AMMO PACK

DIMENSIONS						
	INCHE	ES	MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.175	.185	4.45	4.70		
В	.175	.185	4.45	4.70		
С	.500		12.70			
D	.016	.020	0.41	0.63		
Е	.135	.145	3.43	3.68		
G	.095	.105	2.42	2.67	Straight Lead	
	.173	.220	4.40	5.60	Bent Lead	

For ammo packing detailed specification, click here to visit our website of product packaging for details.

# **Features**

- Halogen free available upon request by adding suffix "-HF"
- Collector Current: I<sub>CM</sub>=0.6A
- Collector-Base Voltage: V<sub>(BR)CBO</sub>=160V
- Operating And Storage Temperatures –55°C to 150°C
- Capable of 625mWatts of Power Dissipation
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1

# Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units	
OFF CHARACTERISTICS					
V <sub>(BR)CEO</sub> *	Collector -Emitter Breakdown Voltage (L=1.0mAdc, I <sub>B</sub> =0)	140		Vdc	
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage (I <sub>C</sub> =100µAdc, I <sub>E</sub> =0)	160		Vdc	
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage (I <sub>E</sub> =10µAdc, I <sub>C</sub> =0)	6.0		Vdc	
Ісво	Collector Cutoff Current (V <sub>CB</sub> =100Vdc, I <sub>E</sub> =0)		0.1	μAdc	
l <sub>EBO</sub>	Emitter Cutoff Current (V <sub>EB</sub> =4.0Vdc, I <sub>C</sub> =0)		50	nAdc	

# **ON CHARACTERISTICS**

h <sub>FE-1</sub>	DC Current Gain	60		
	(V <sub>CE</sub> =5.0Vdc, <sub>b</sub> =1.0mAdc)			
h <sub>FE-2</sub>	DC Current Gain	60		250
	(V <sub>CE</sub> =5.0Vdc, b=10mAdc)			
h <sub>FE-3</sub>	DC Current Gain	20		
	(V <sub>CE</sub> =5.0Vdc, <sub>C</sub> =50mAdc)			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage			
	(l <sub>c</sub> =10mAdc, l <sub>s</sub> =1.0mAdc)		0.15	Vdc
	(l <sub>c</sub> =50mAdc, l <sub>B</sub> =5.0mAdc)		0.25	Vdc
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage			
	(l <sub>c</sub> =10mAdc,l <sub>g</sub> =1.0mAdc)		1.0	Vdc
	$(l_c=50 \text{mAdc}, l_B=5.0 \text{mAdc})$		1.2	Vdc
f,	Transition frequency			
- (	(Vc=10V,lc=10mA,,f=100MHz)	100	300	MHz
	, , ,			
C <sub>ob</sub>	Collector output capacitance	i		_
	(V <sub>CB</sub> =10V,I <sub>E</sub> =0,f=1MHz)		6	pF
NF	Noise figure			
	(Vc==5V,Ic=0.25mA,f=1KHz)		6	pF

<sup>\*</sup>Pulse test: pulse width <300uS, duty cycle< 2.0%

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# **Ordering Information:**

Device	Packing
Part Number-AP	Ammo Packing: 20 Kpcs/Carton
Part Number-BP	Bulk: 100 Kpcs/Carton

Note: Adding "-HF" suffix for halogen free, eg. Part Number-AP-HF

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