



Micro Commercial Components



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2N3906

PNP General Purpose Amplifier

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- € Capable of 600mW of Power Dissipation and 200mA I_c
- € Epoxy meets UL 94 V-0 flammability rating
- € Moisture Sensitivity Level 1
- € Through Hole Package
- € Halogen free available upon request by adding suffix "-HF"
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage* (I _C =1.0mA, I _B =0)	40		Vdc
V _{(BR)CBO}	Collector-Base Breakdown Voltage (I _C =10μA, I _E =0)	40		Vdc
V _{(BR)EBO}	Emitter-Base Breakdown Voltage (I _E =10μA, I _C =0)	5.0		Vdc
I _{BL}	Base Cutoff Current (V _{CE} =30Vdc, V _{BE} =3.0Vdc)		50	nA
I _{CEX}	Collector Cutoff Current (V _{CE} =30Vdc, V _{BE} =3.0Vdc)		50	nA

ON CHARACTERISTICS

h _{FE}	DC Current Gain* (I _C =0.1mA, V _{CE} =1.0Vdc) (I _C =1.0mA, V _{CE} =1.0Vdc) (I _C =10mA, V _{CE} =1.0Vdc) (I _C =50mA, V _{CE} =1.0Vdc) (I _C =100mA, V _{CE} =1.0Vdc)	60 80 100 60 30	300	
V _{CE(sat)}	Collector-Emitter Saturation Voltage (I _C =10mA, I _B =1.0mA) (I _C =50mA, I _B =5.0mA)		0.25 0.4	Vdc
V _{BE(sat)}	Base-Emitter Saturation Voltage (I _C =10mA, I _B =1.0mA) (I _C =50mA, I _B =5.0mA)	0.65	0.85 0.95	Vdc

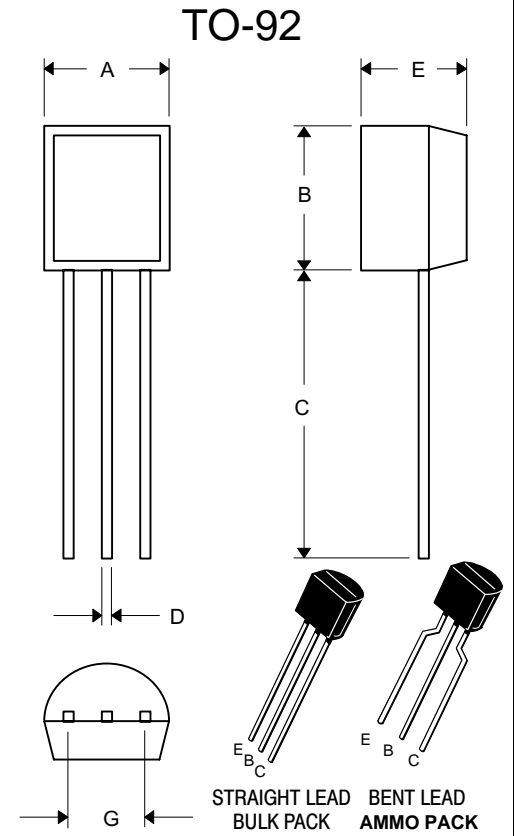
SMALL-SIGNAL CHARACTERISTICS

f _T	Current Gain-Bandwidth Product (I _C =10mA, V _{CE} =20Vdc, f=100MHz)	250		MHz
C _{obo}	Output Capacitance (V _{CB} =5.0Vdc, I _E =0, f=100kHz)		4.5	pF
C _{ibo}	Input Capacitance (V _{BE} =0.5Vdc, I _C =0, f=100kHz)		10.0	pF
NF	Noise Figure (I _C =100μA, V _{CE} =5.0Vdc, R _S =1.0kΩ f=10Hz to 15.7kHz)		4.0	dB

SWITCHING CHARACTERISTICS

t _d	Delay Time	(V _{CC} =3.0Vdc, V _{BE} =0.5Vdc I _C =10mA, I _{B1} =1.0mA)	35	ns
t _r	Rise Time	(V _{CC} =3.0Vdc, V _{BE} =0.5Vdc I _C =10mA, I _{B1} =1.0mA)	35	ns
t _s	Storage Time	(V _{CC} =3.0Vdc, I _C =10mA)	225	ns
t _f	Fall Time	(I _{B1} =I _{B2} =1.0mA)	75	ns

*Pulse Width ≤ 300μs, Duty Cycle ≤ 2.0%

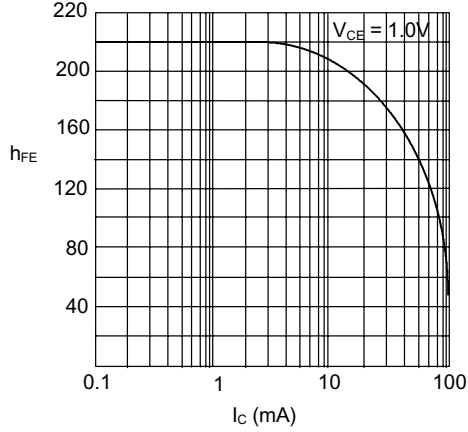


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.175	.185	4.45	4.70	
B	.175	.185	4.45	4.70	
C	.500	---	12.70	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	Straight Lead
	.173	.220	4.40	5.60	Bent Lead

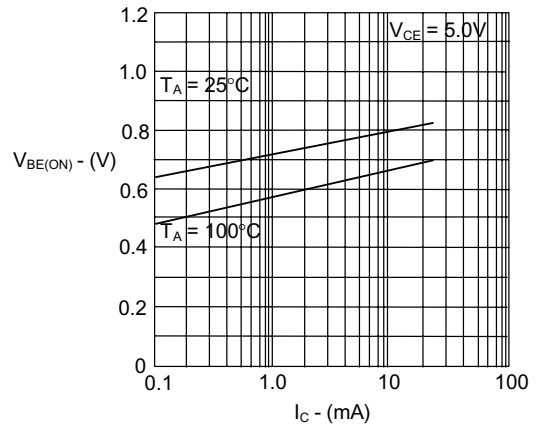
* For ammo packing detailed specification, click here to visit our website of product packaging for details.

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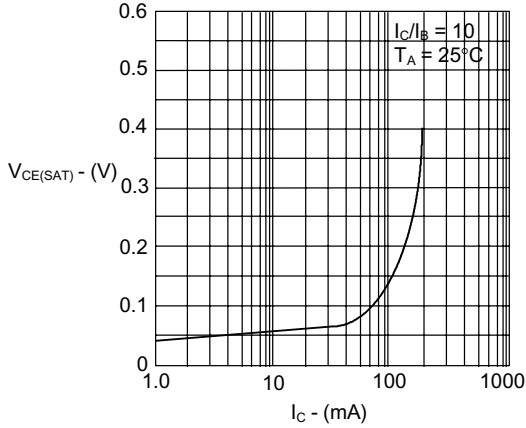
DC Current Gain vs Collector Current



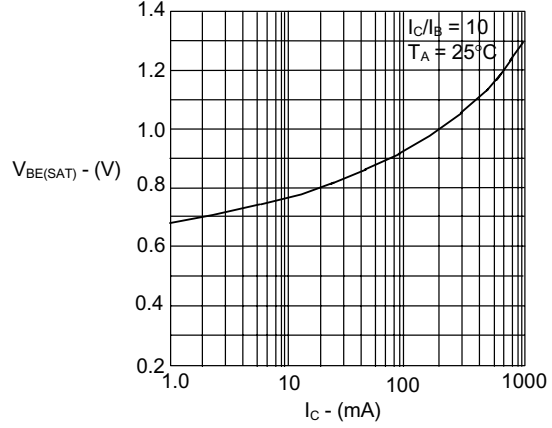
Base-Emitter ON Voltage vs Collector Current



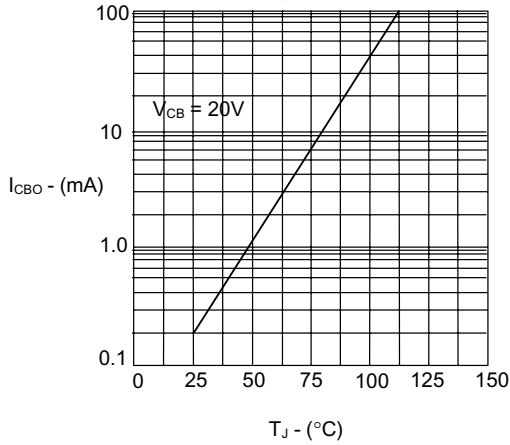
Collector-Emitter Saturation Voltage vs Collector Current



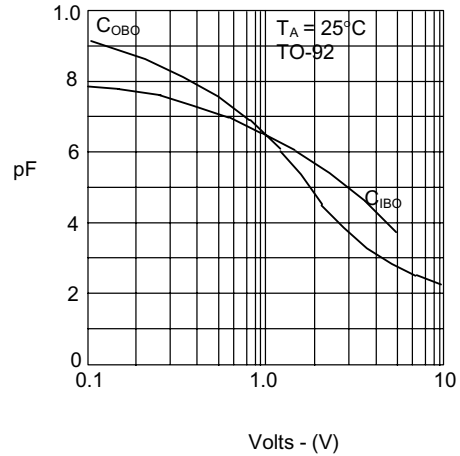
Base-Emitter Saturation Voltage vs Collector Current



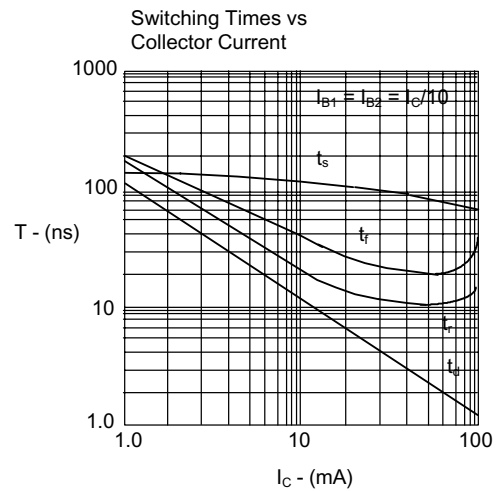
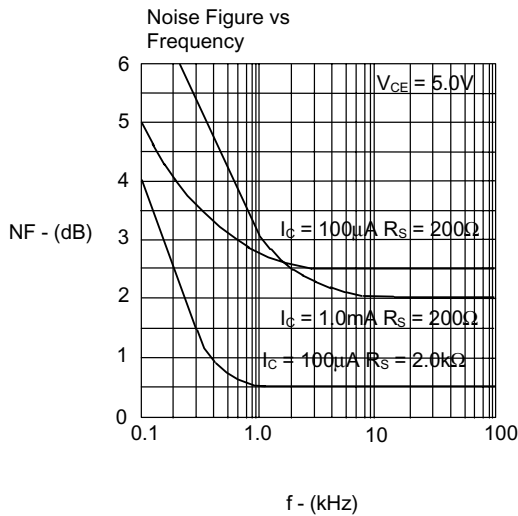
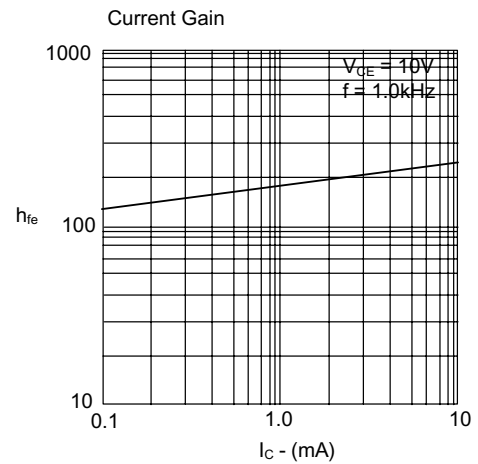
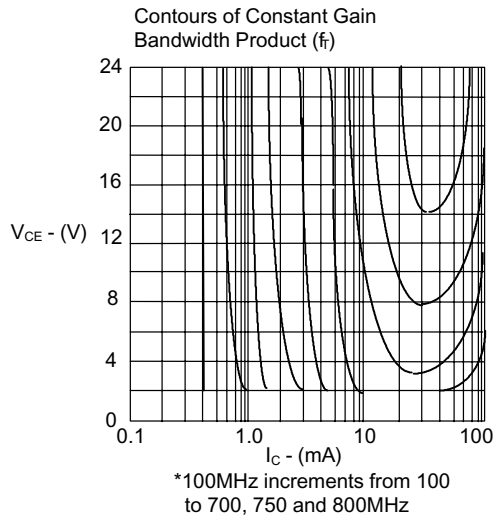
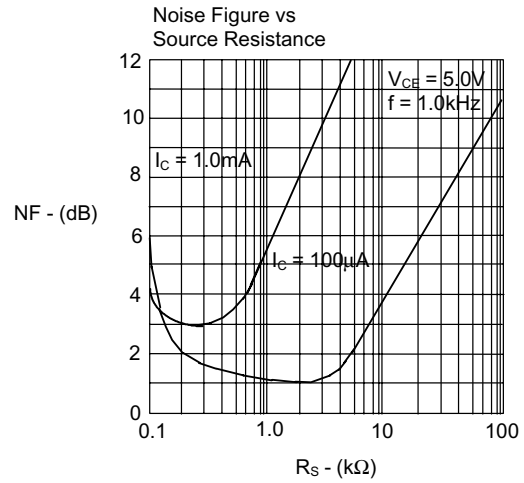
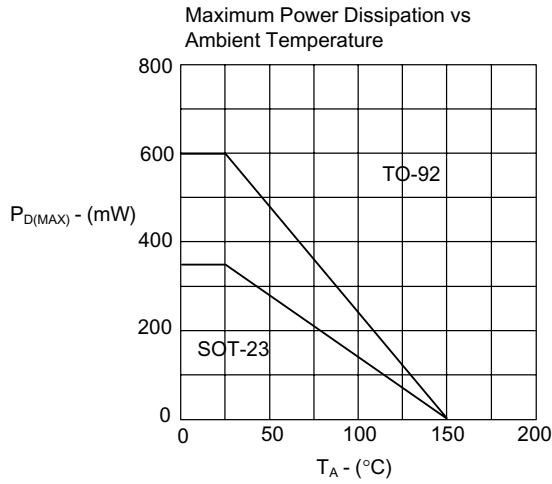
Collector-Base Diode Reverse Current vs Temperature



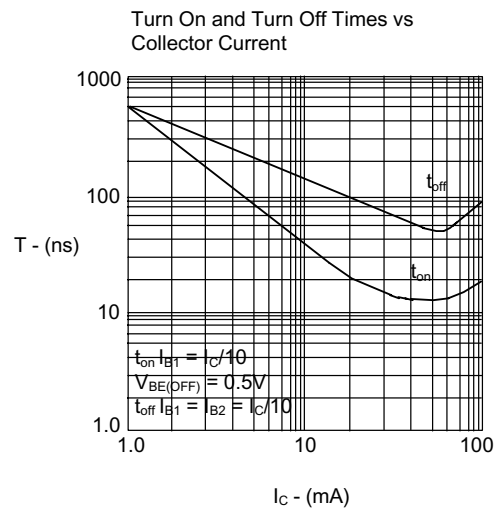
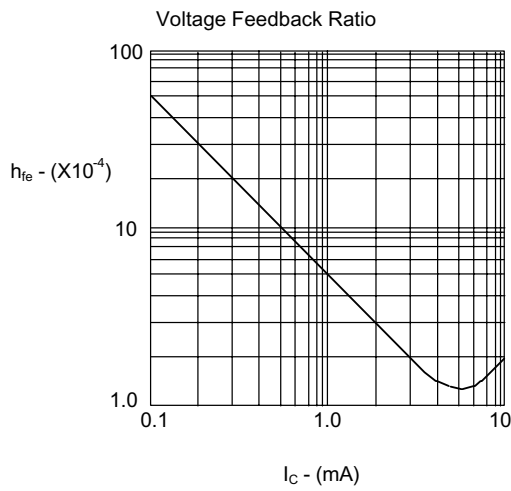
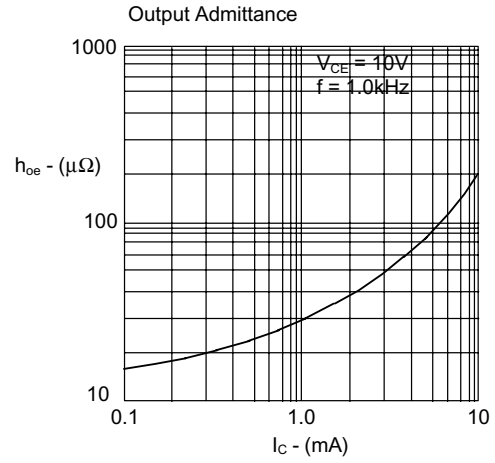
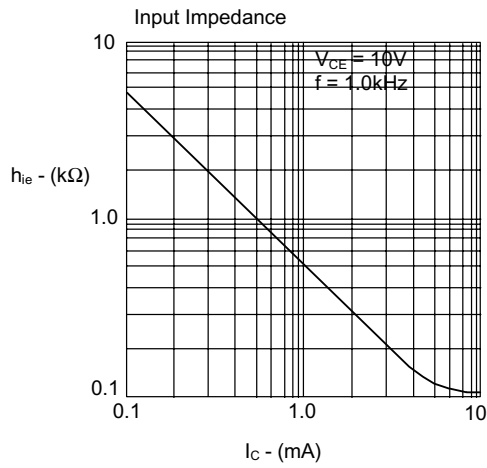
Common Base Open Circuit Input and Output Capacitance vs Reverse Bias Voltage



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Ordering Information :

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

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

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- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
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- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
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- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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