

# PN2907A

## PNP General Purpose Amplifier

### Features

- Halogen free available upon request by adding suffix "-HF"
- Through Hole Package
- Capable of 600mWatts of Power Dissipation and 600mA Ic
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Marking:MPS2907A
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
<b>OFF CHARACTERISTICS</b>				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ( $I_C=10mA$ , $I_B=0$ )	60		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=10\mu A$ , $I_E=0$ )	60		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E=10\mu A$ , $I_C=0$ )	5.0		Vdc
$I_{BL}$	Base Cutoff Current ( $V_{CE}=30Vdc$ , $V_{BE}=0.5Vdc$ )		50	nAdc
$I_{CEX}$	Collector Cutoff Current ( $V_{CE}=30Vdc$ , $V_{BE}=0.5Vdc$ )		50	nAdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=50Vdc$ , $I_E=0$ ) ( $V_{CB}=50Vdc$ , $I_E=0$ , $T_A=150^\circ C$ )		0.1 10.0	$\mu A$ dc

### ON CHARACTERISTICS

$h_{FE}$	DC Current Gain* ( $I_C=0.1mA$ , $V_{CE}=10Vdc$ ) ( $I_C=1.0mA$ , $V_{CE}=10Vdc$ ) ( $I_C=10mA$ , $V_{CE}=10Vdc$ ) ( $I_C=150mA$ , $V_{CE}=10Vdc$ ) ( $I_C=500mA$ , $V_{CE}=10Vdc$ )	75		
		100		300
		100		
		100		
		50		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=150mA$ , $I_B=15mA$ ) ( $I_C=500mA$ , $I_B=50mA$ )		0.4 1.6	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ( $I_C=150mA$ , $I_B=15mA$ ) ( $I_C=500mA$ , $I_B=50mA$ )		1.3 2.6	Vdc

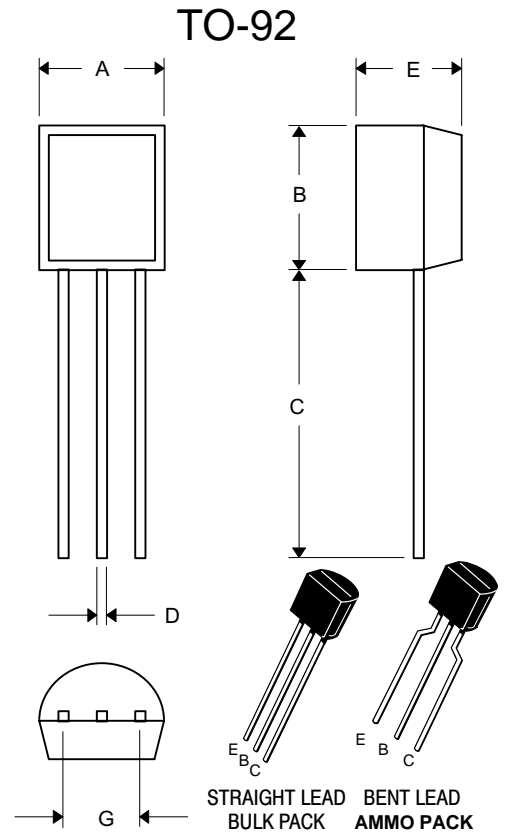
### SMALL-SIGNAL CHARACTERISTICS

$f_T$	Current Gain-Bandwidth Product ( $I_C=50mA$ , $V_{CE}=20Vdc$ , $f=100MHz$ )	200		MHz
$C_{cbo}$	Output Capacitance ( $V_{CB}=10Vdc$ , $I_E=0$ , $f=100kHz$ )		8.0	pF
$C_{ibo}$	Input Capacitance ( $V_{EB}=2.0Vdc$ , $I_C=0$ , $f=100kHz$ )		30.0	pF

### SWITCHING CHARACTERISTICS

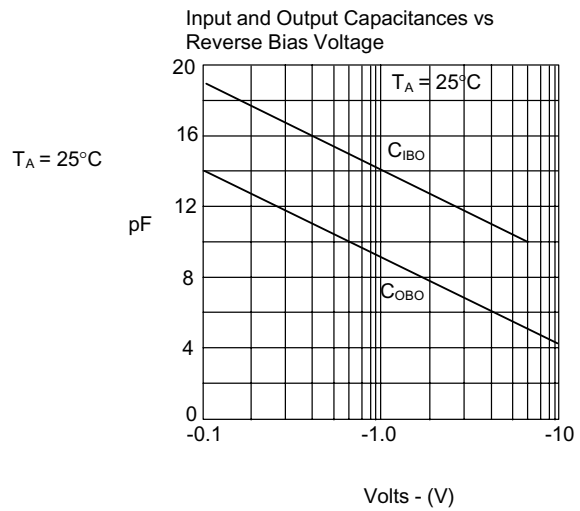
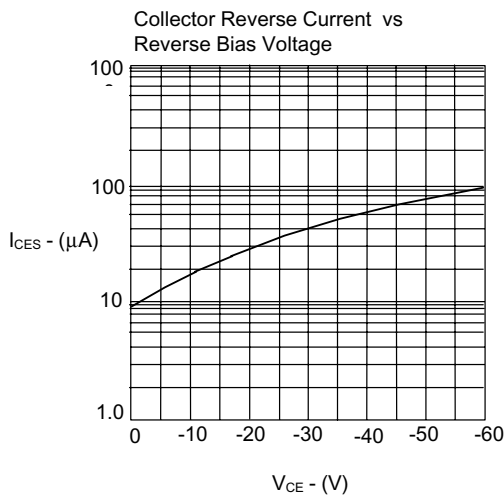
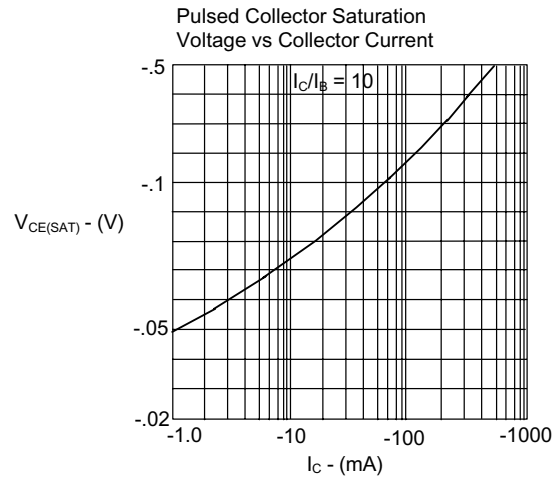
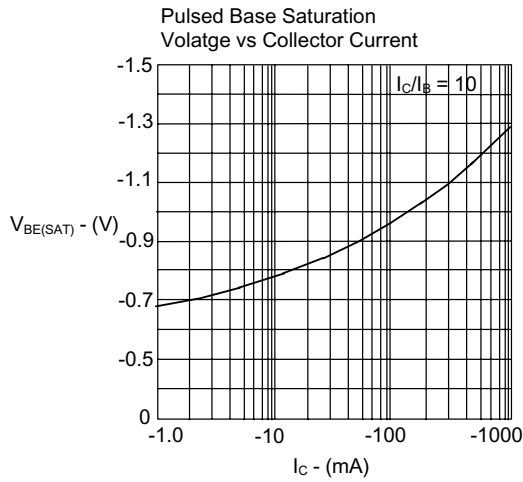
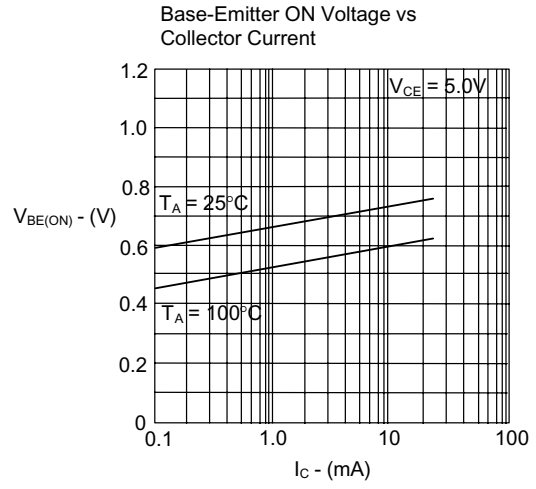
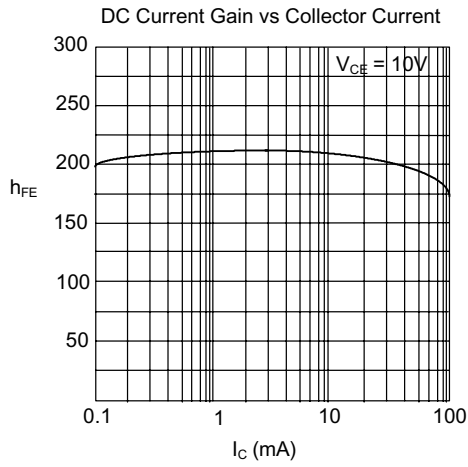
$t_d$	Delay Time	( $V_{CC}=3.0Vdc$ , $I_C=150mA$ )	10	ns
$t_r$	Rise Time	( $I_{B1}=15mA$ )	40	ns
$t_s$	Storage Time	( $V_{CC}=3.0Vdc$ , $I_C=150mA$ )	80	ns
$t_f$	Fall Time	( $I_{B1}=I_{B2}=15mA$ )	30	ns

\*Pulse Width  $\leq 300\mu s$ , Duty Cycle  $\leq 2.0\%$



DIM	DIMENSIONS				NOTE
	INCHES		MM		
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

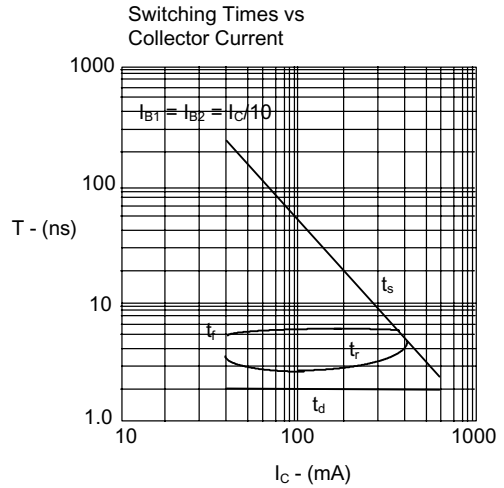
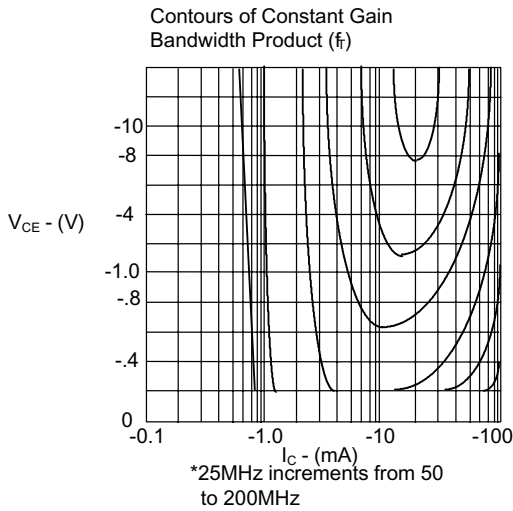
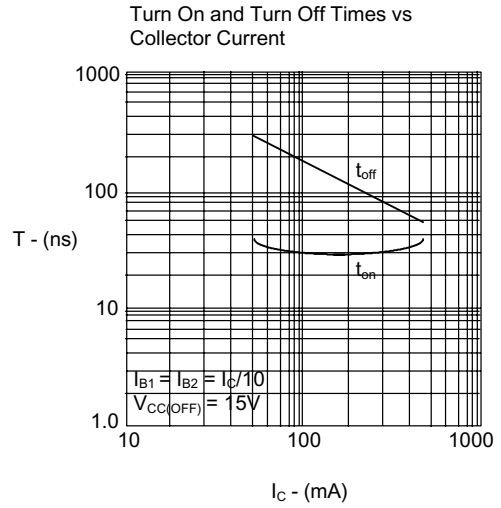
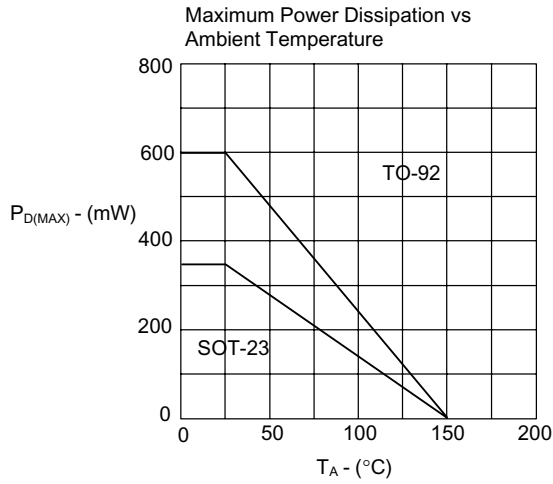
\* For ammo packing detailed specification, click here to visit our website of product packaging for details.



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### 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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