



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 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
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#### OFF CHARACTERISTICS

$V_{(BR)CEO}$	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* ( $I_C=0.1mA$ , $V_{CE}=10Vdc$ ) ( $I_C=1.0mA$ , $V_{CE}=10Vdc$ ) ( $I_C=10mA$ , $V_{CE}=10Vdc$ ) ( $I_C=150mA$ , $V_{CE}=10Vdc$ ) ( $I_C=500mA$ , $V_{CE}=10Vdc$ )	75 100 100 100 50	300	
$V_{CE(sat)}$	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

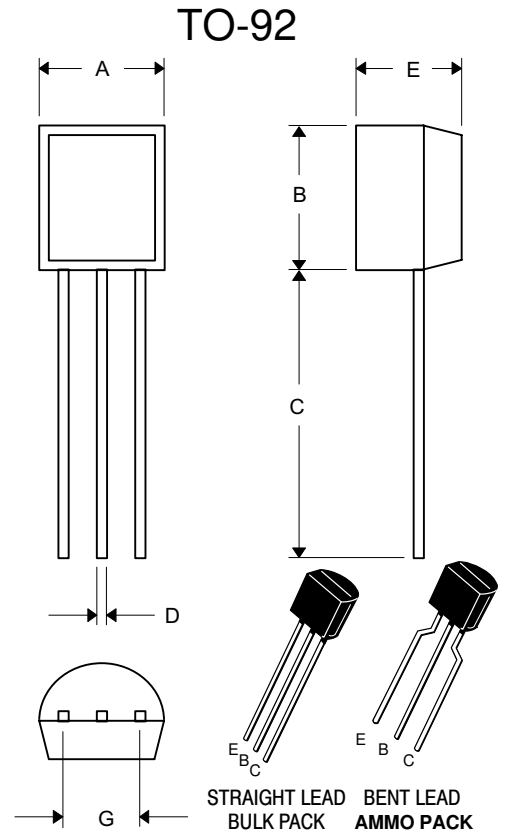
#### SMALL-SIGNAL CHARACTERISTICS

$f_T$	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

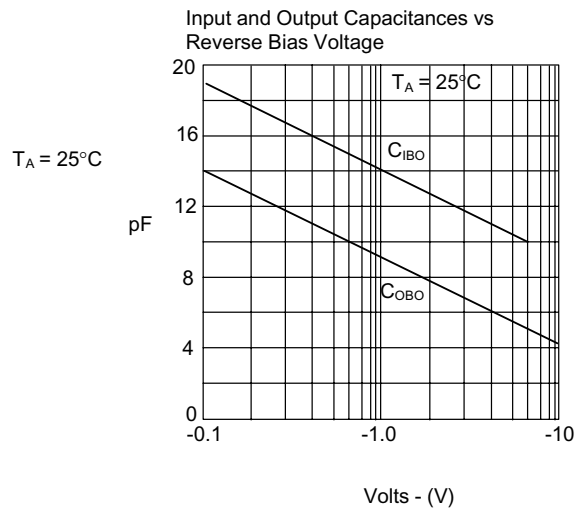
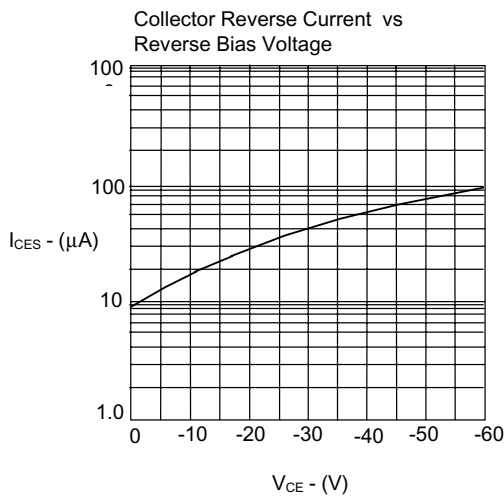
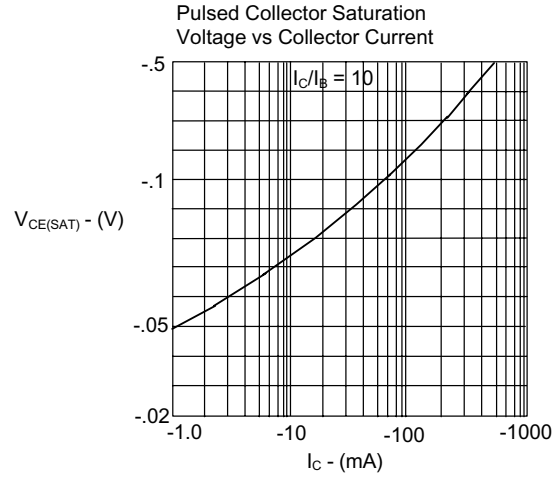
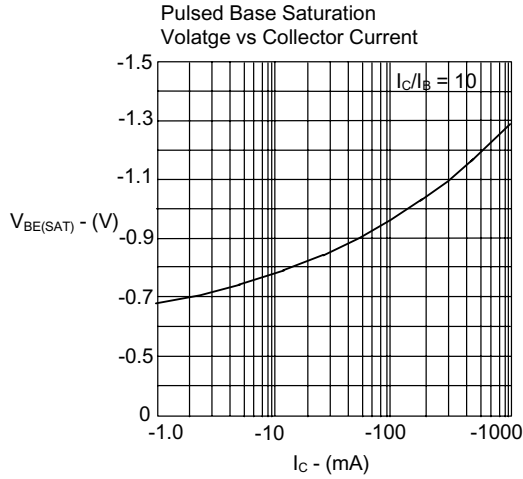
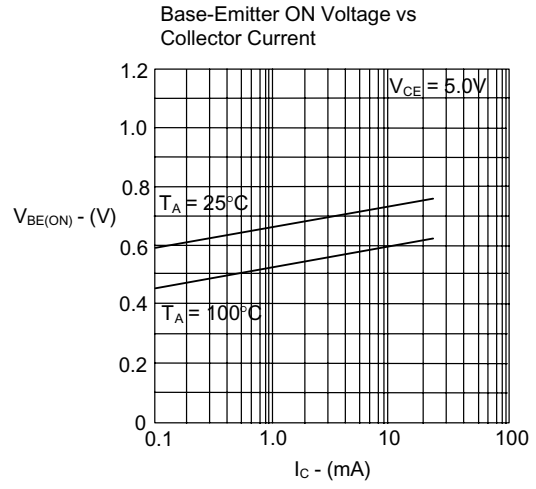
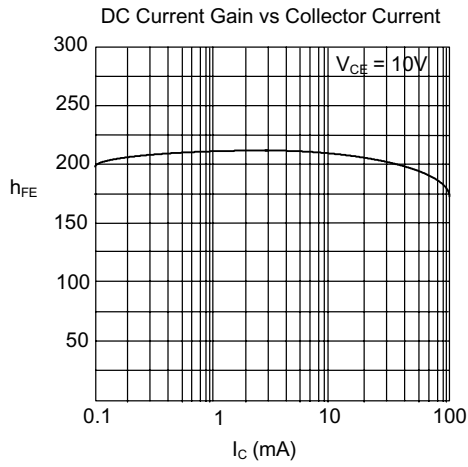
$t_d$	Delay Time	( $V_{CC}=3.0Vdc$ , $I_C=150mA$ )	10	ns
$t_r$	Rise Time	( $I_{B1}=15mA$ )	40	ns
$t_s$	Storage Time	( $V_{CC}=3.0Vdc$ , $I_C=150mA$ )	80	ns
$t_f$	Fall Time	( $I_{B1}=I_{B2}=15mA$ )	30	ns

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



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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

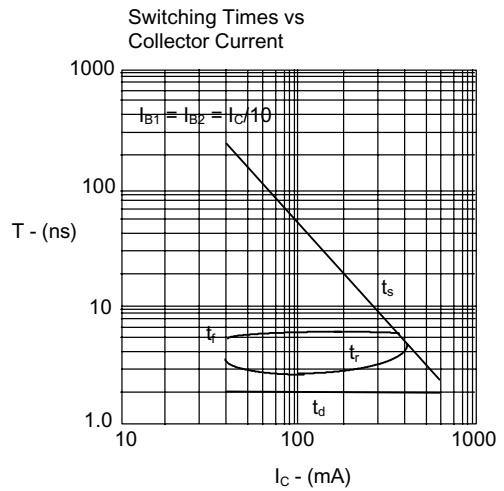
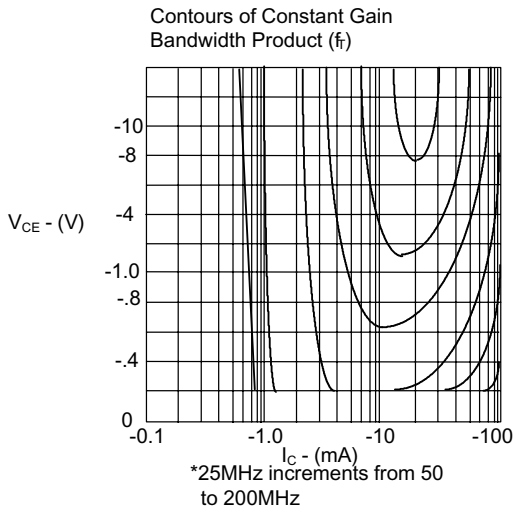
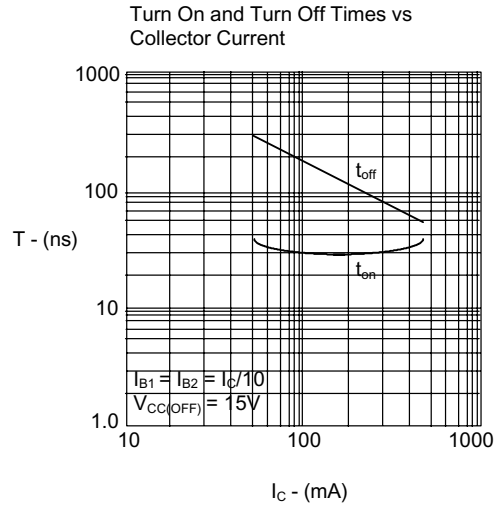
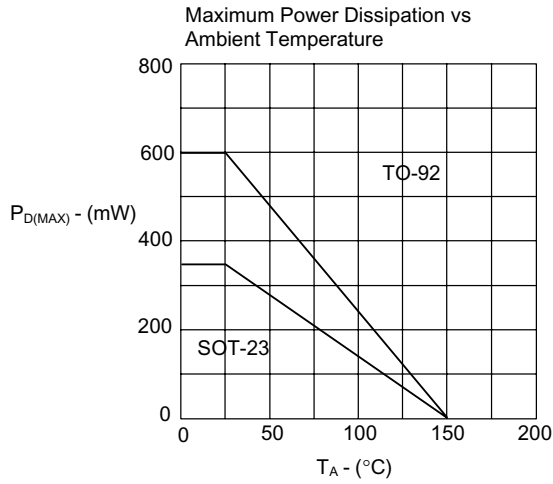
\* For ammo packing detailed specification, click here to visit our website of product packaging for details.



# PN2907A



Micro Commercial Components







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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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