



Micro Commercial Components

Micro Commercial Components  
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PN2907A

## Features

- Through Hole Package
- Capable of 600mWatts of Power Dissipation
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Marking: MPS2907A

PNP General Purpose Amplifier

## Electrical Characteristics @ 25°C Unless Otherwise Specified

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

## ON CHARACTERISTICS

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

## SMALL-SIGNAL CHARACTERISTICS

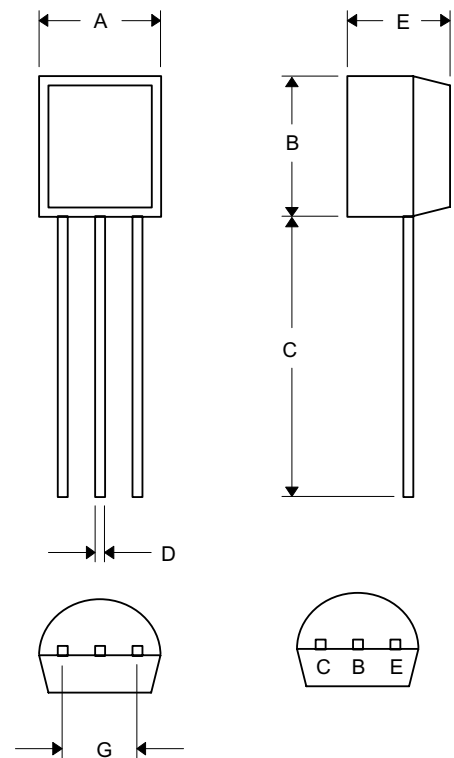
$f_T$	Current Gain-Bandwidth Product ( $I_C=50\text{mAdc}$ , $V_{CE}=20\text{Vdc}$ , $f=100\text{MHz}$ )	200		MHz
$C_{cbo}$	Output Capacitance ( $V_{CB}=10\text{Vdc}$ , $I_E=0$ , $f=100\text{kHz}$ )		8.0	pF
$C_{ibo}$	Input Capacitance ( $V_{EB}=2.0\text{Vdc}$ , $I_C=0$ , $f=100\text{kHz}$ )		30.0	pF

## SWITCHING CHARACTERISTICS

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

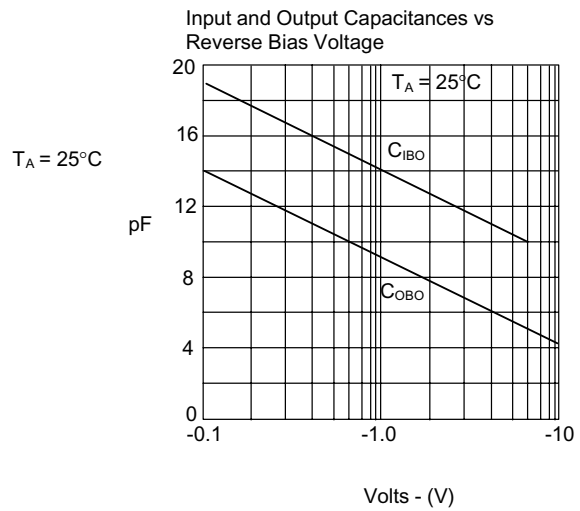
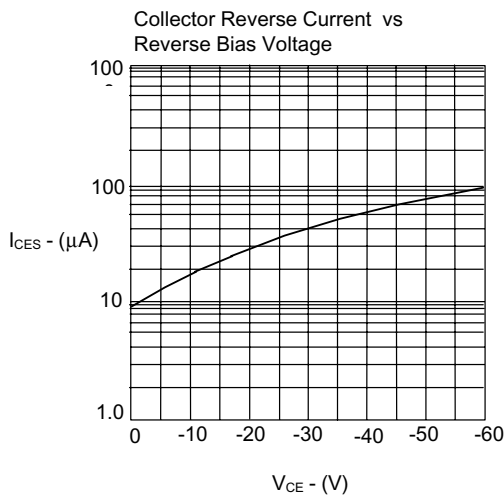
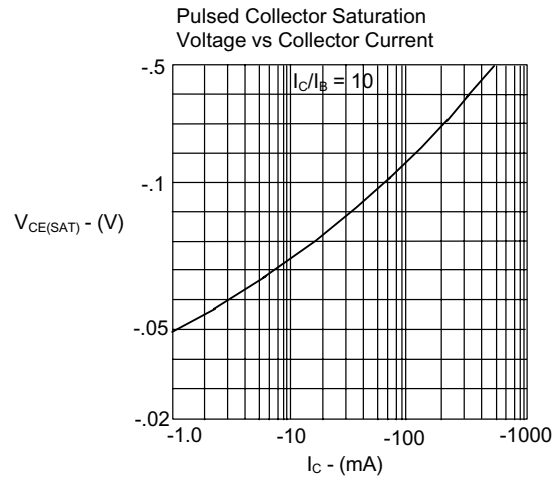
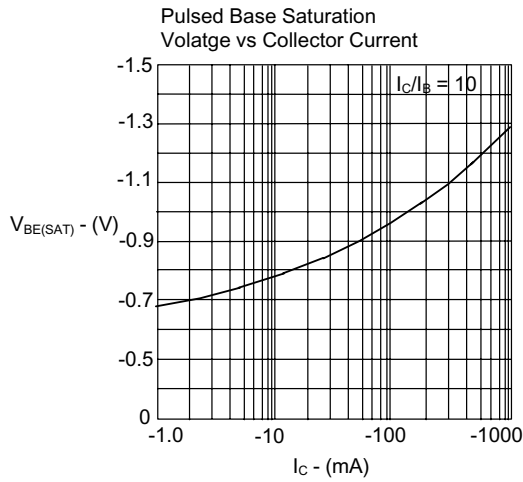
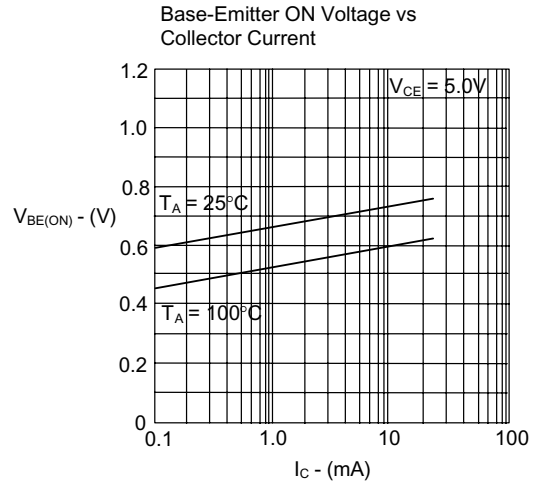
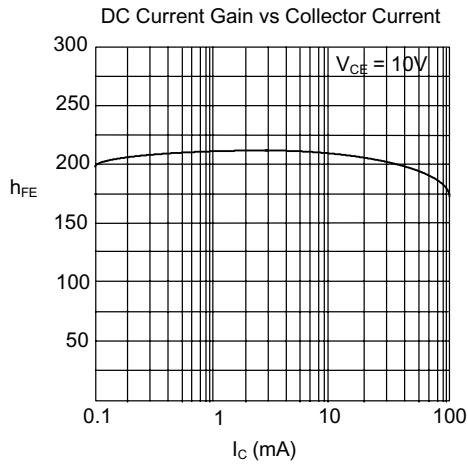
\*Pulse Width  $\leq 300\mu\text{s}$ , Duty Cycle  $\leq 2.0\%$

TO-92



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.170	.190	4.33	4.83	
B	.170	.190	4.30	4.83	
C	.550	.590	13.97	14.97	
D	.010	.020	0.36	0.56	
E	.130	.160	3.30	3.96	
G	.010	.104	2.44	2.64	

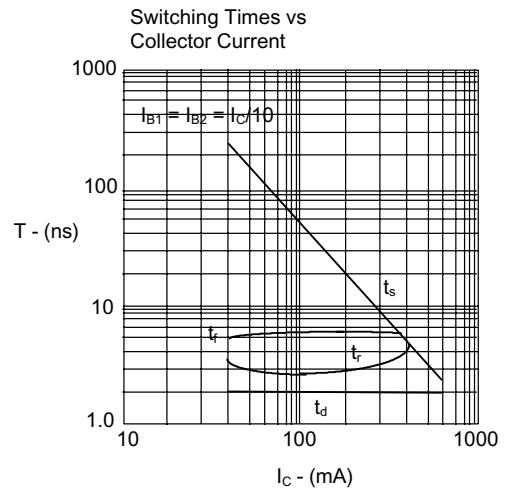
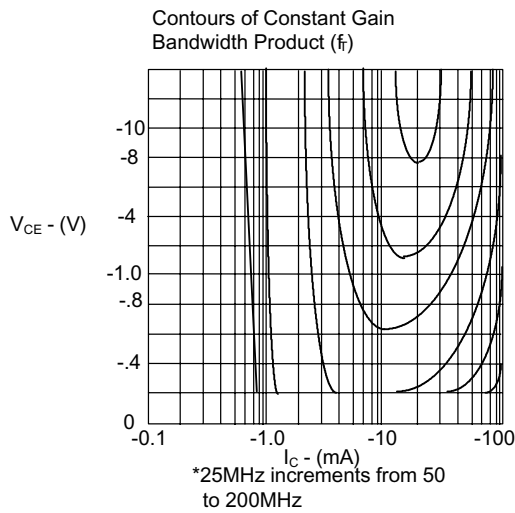
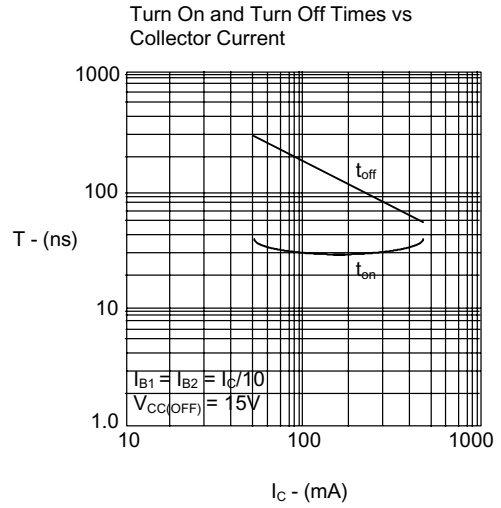
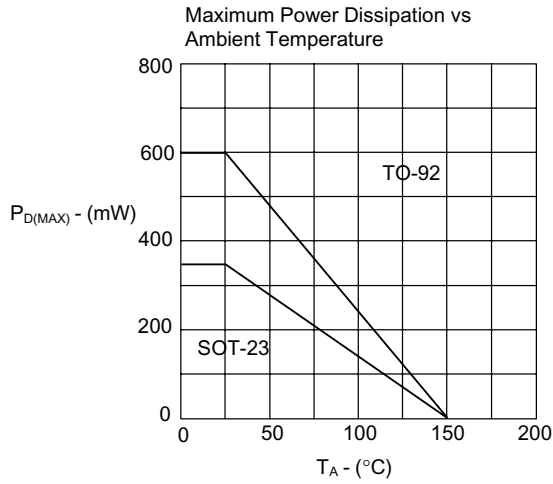
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