



Micro Commercial Components

Micro Commercial Components
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PN2907A

Features

- 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
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 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* ($I_C=10\text{mAdc}$, $I_B=0$)	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	μAdc

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

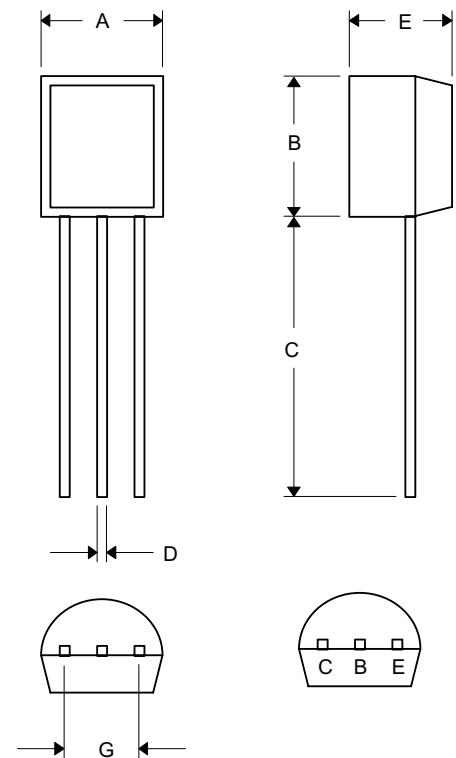
SWITCHING CHARACTERISTICS

t_d	Delay Time	($V_{CC}=3.0\text{Vdc}$, $I_C=150\text{mAdc}$)	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 $\leq 2.0\%$

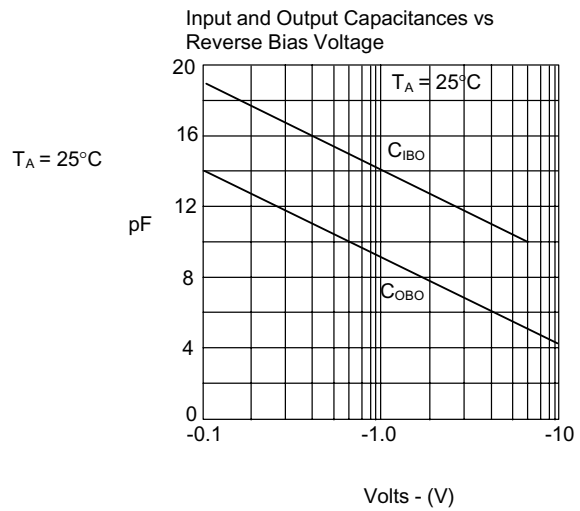
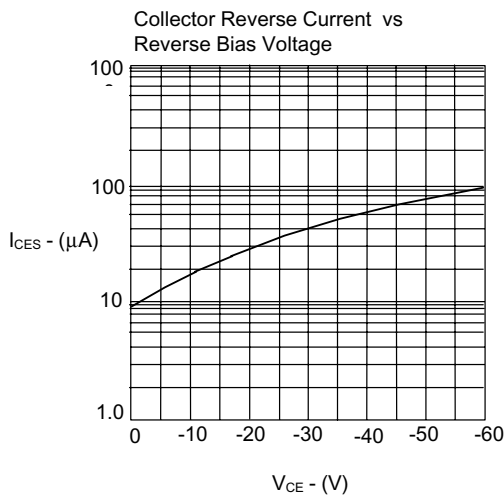
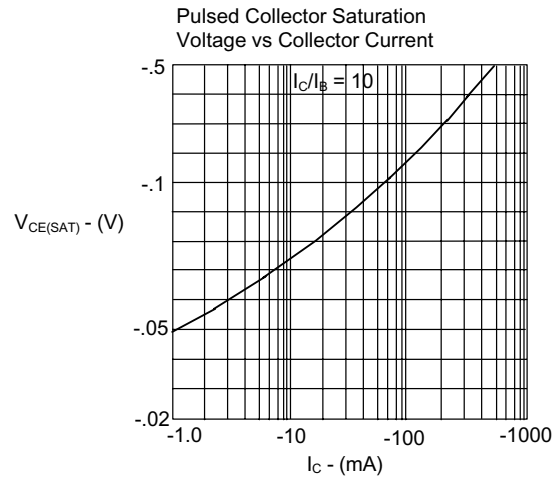
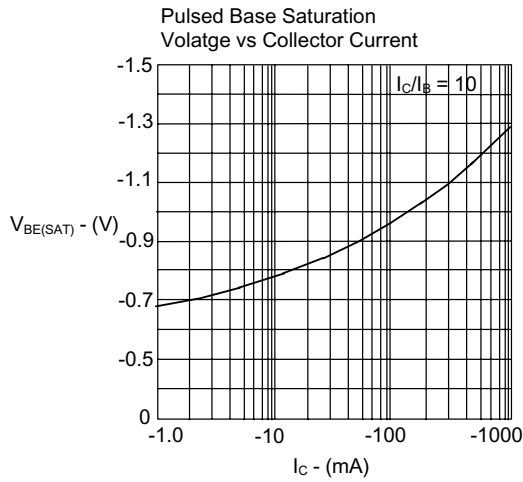
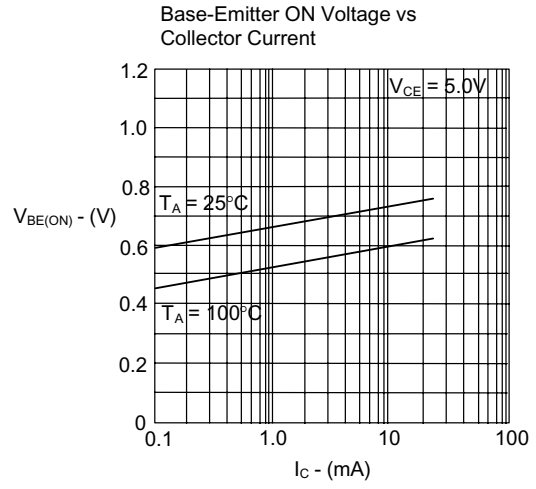
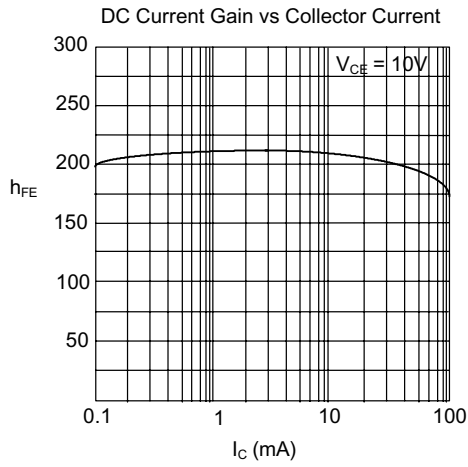
PNP General Purpose Amplifier

TO-92



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
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	

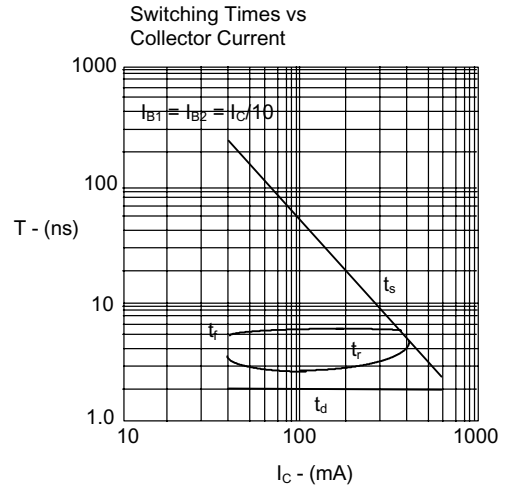
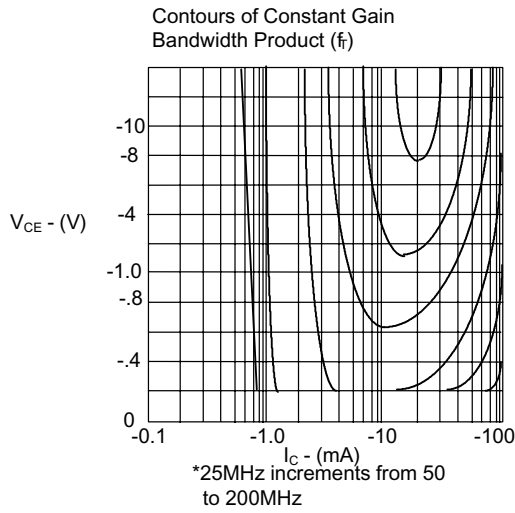
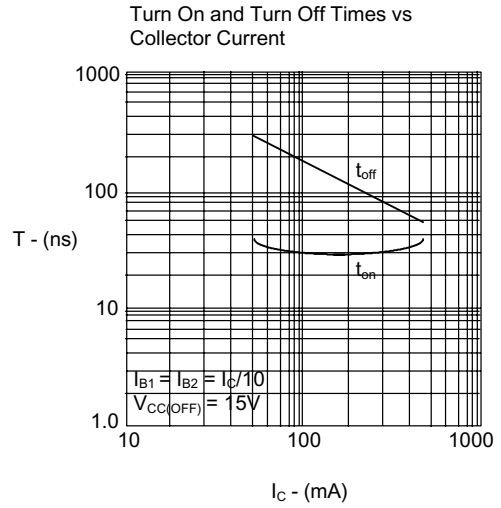
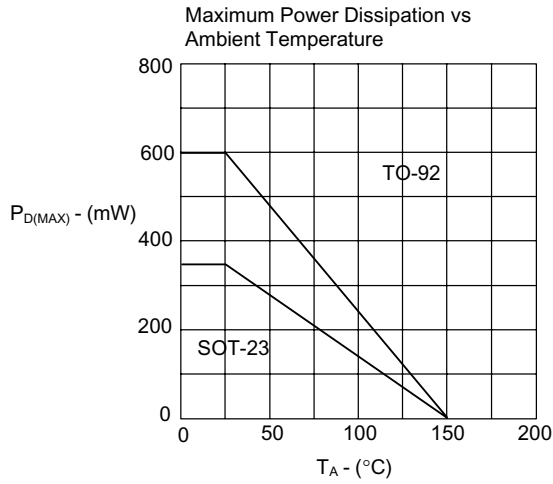
www.mccsemi.com



PN2907A



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Ordering Information

Device	Packing
(Part Number)-AP	Tape&Reel;2Kpcs/Box
(Part Number)-BP	Bulk;1Kpcs/Bag

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