



Micro Commercial Components



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PN2907A

Features

- Halogen free available upon request by adding suffix "-HF"
- Through Hole Package
- Capable of 600mWatts of Power Dissipation and 600mA I_C
- 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
OFF CHARACTERISTICS				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ($I_C=10\text{mA}$, $I_B=0$)	60		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=10\mu\text{A}$, $I_E=0$)	60		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=10\mu\text{A}$, $I_C=0$)	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* ($I_C=0.1\text{mA}$, $V_{CE}=10\text{Vdc}$) ($I_C=1.0\text{mA}$, $V_{CE}=10\text{Vdc}$) ($I_C=10\text{mA}$, $V_{CE}=10\text{Vdc}$) ($I_C=150\text{mA}$, $V_{CE}=10\text{Vdc}$) ($I_C=500\text{mA}$, $V_{CE}=10\text{Vdc}$)	75 100 100 100 50	300	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=150\text{mA}$, $I_B=15\text{mA}$) ($I_C=500\text{mA}$, $I_B=50\text{mA}$)		0.4 1.6	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=150\text{mA}$, $I_B=15\text{mA}$) ($I_C=500\text{mA}$, $I_B=50\text{mA}$)		1.3 2.6	Vdc

SMALL-SIGNAL CHARACTERISTICS

f_T	Current Gain-Bandwidth Product ($I_C=50\text{mA}$, $V_{CE}=20\text{Vdc}$, $f=100\text{MHz}$)	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

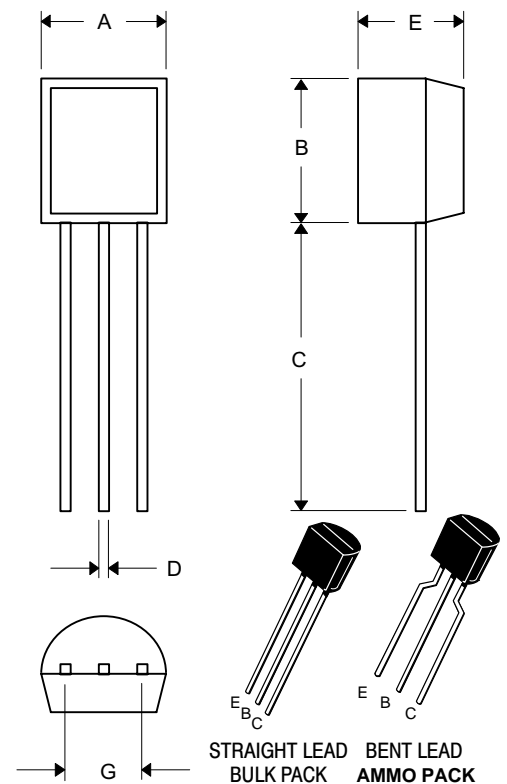
SWITCHING CHARACTERISTICS

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

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

PNP General Purpose Amplifier

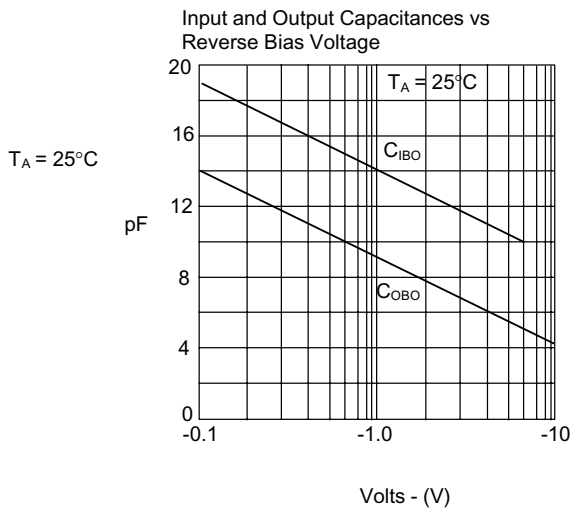
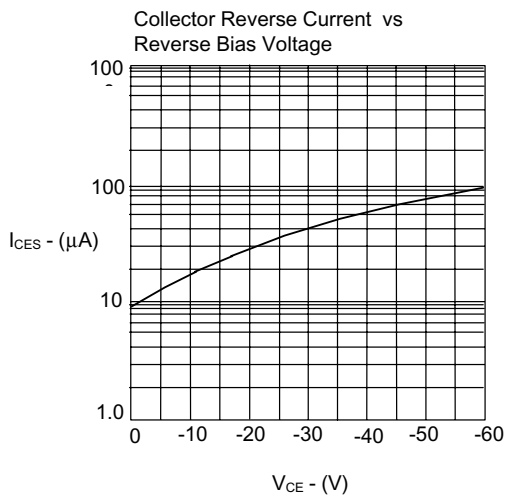
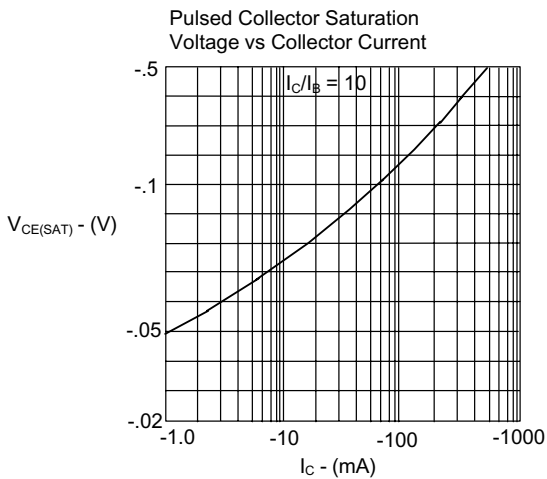
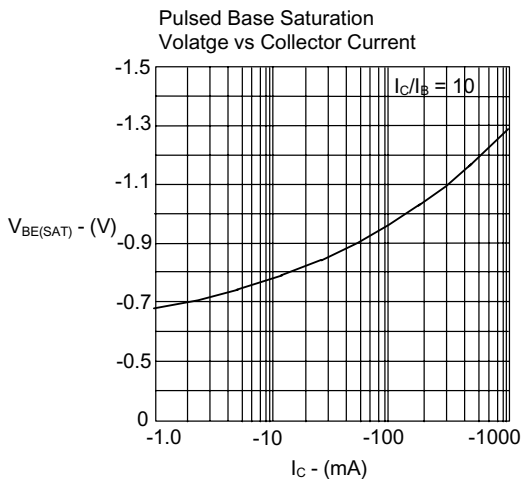
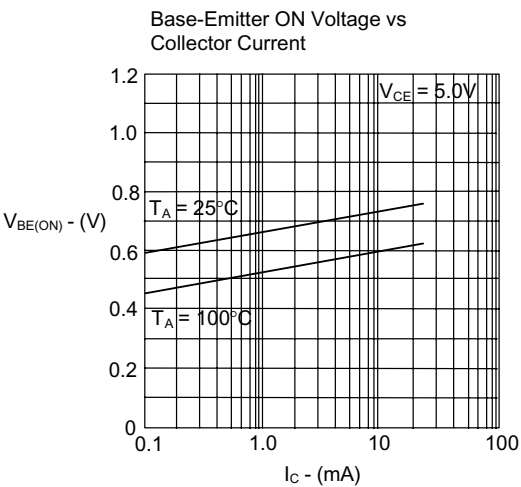
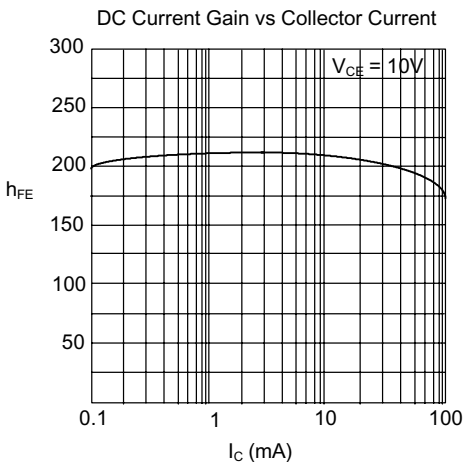
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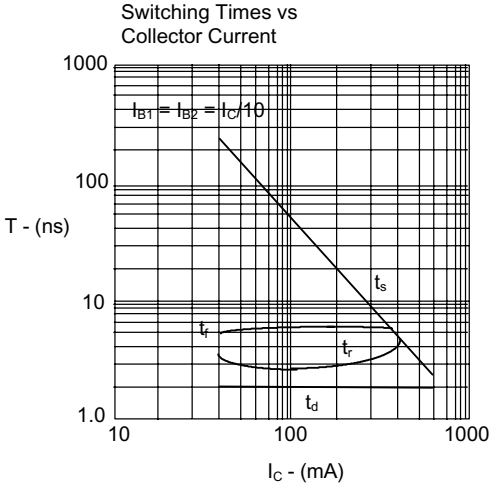
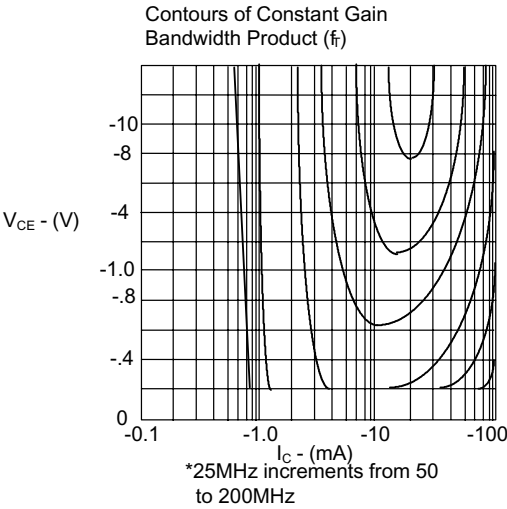
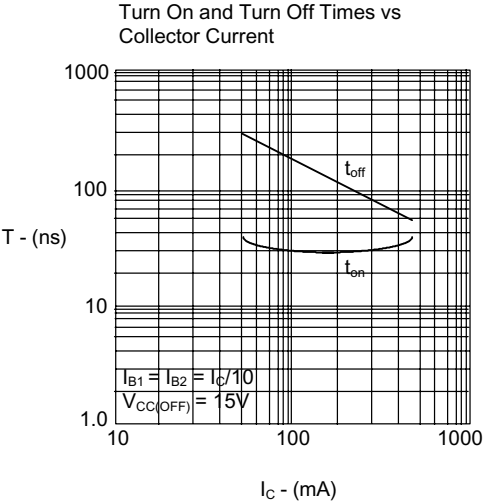
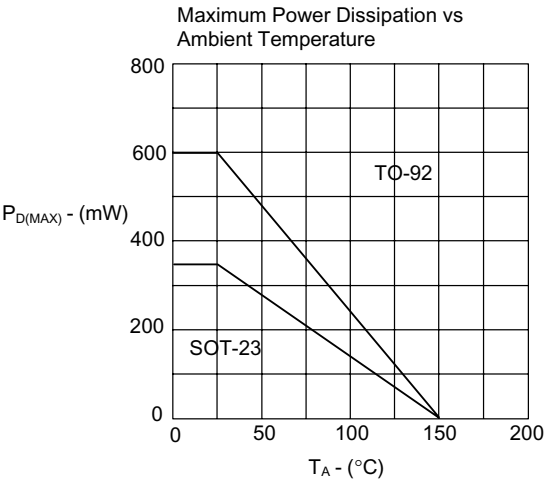
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.175	.185	4.45	4.70	
B	.175	.185	4.45	4.70	
C	.500	—	12.70	—	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	Straight Lead
	.173	.220	4.40	5.60	Bent Lead

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

www.mccsemi.com



PN2907A



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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