



Micro Commercial Components

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20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

PN2907A

PNP General Purpose Amplifier

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 |
|----------------------------|--|-----|-------------|------------|
| 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 | μA 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 |

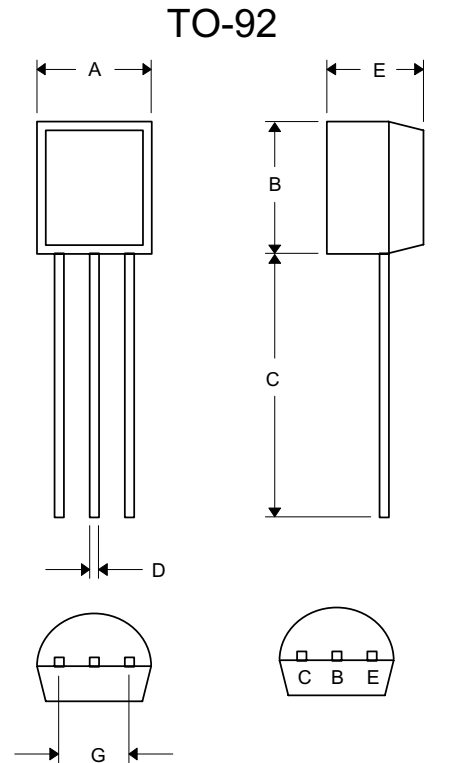
SMALL-SIGNAL CHARACTERISTICS

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

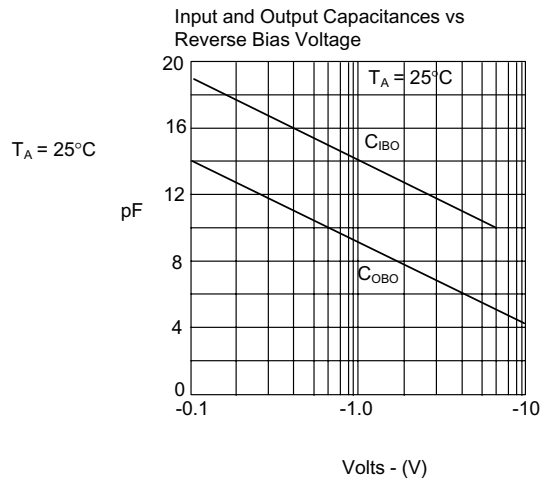
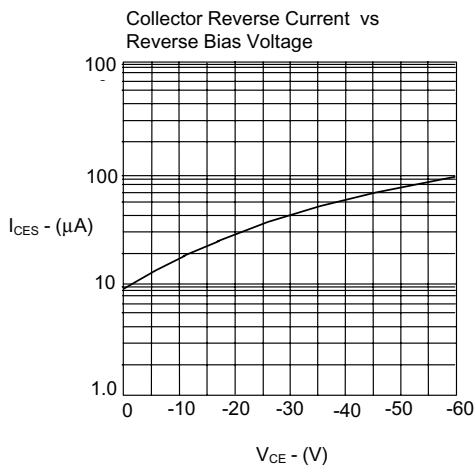
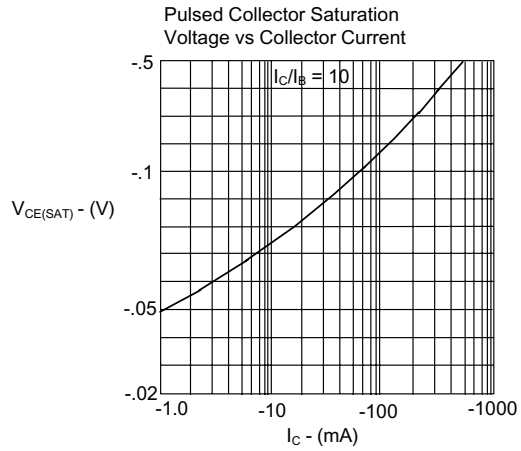
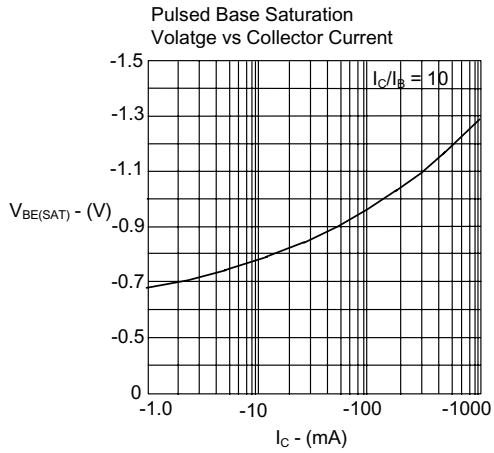
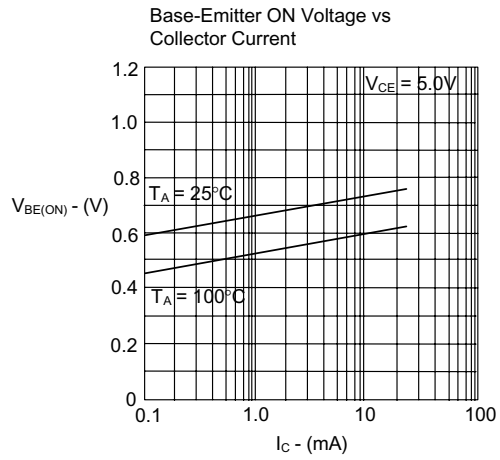
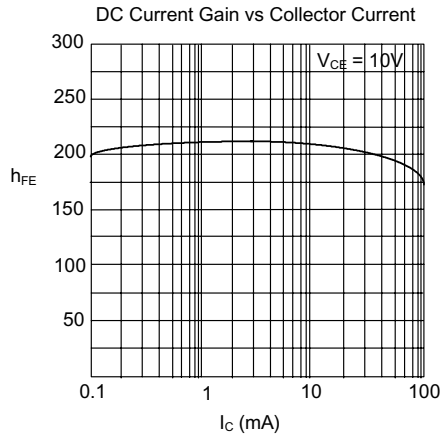
*Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2.0\%$



| 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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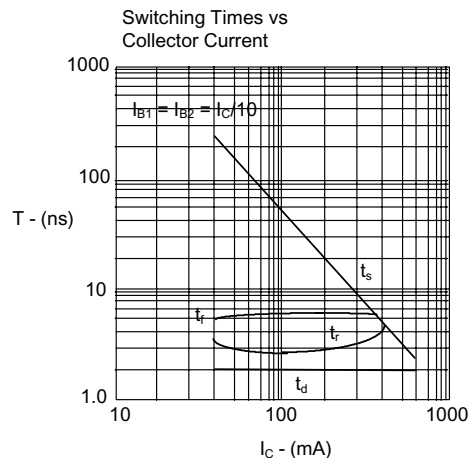
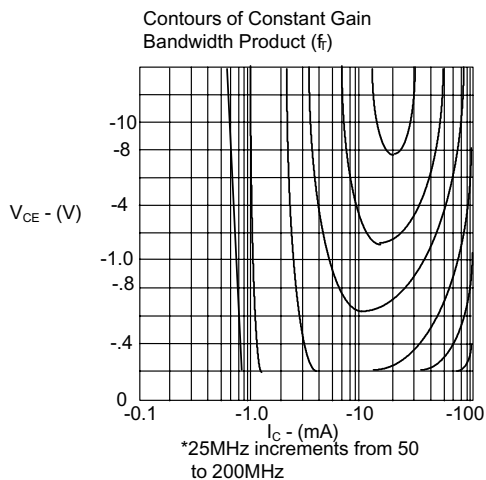
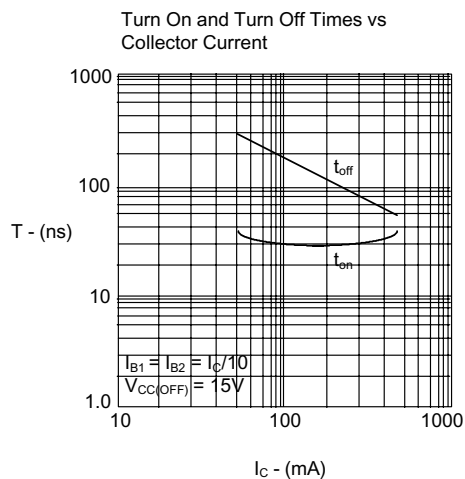
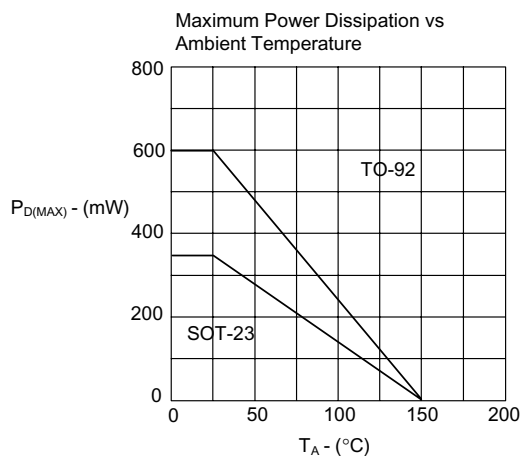


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Ordering Information

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

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