

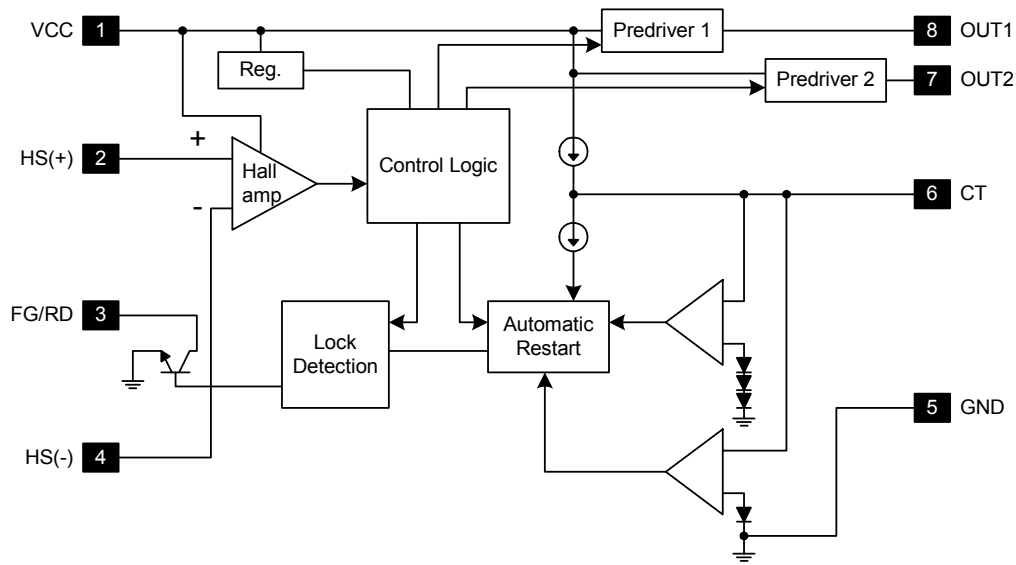
Not Recommended for New Design



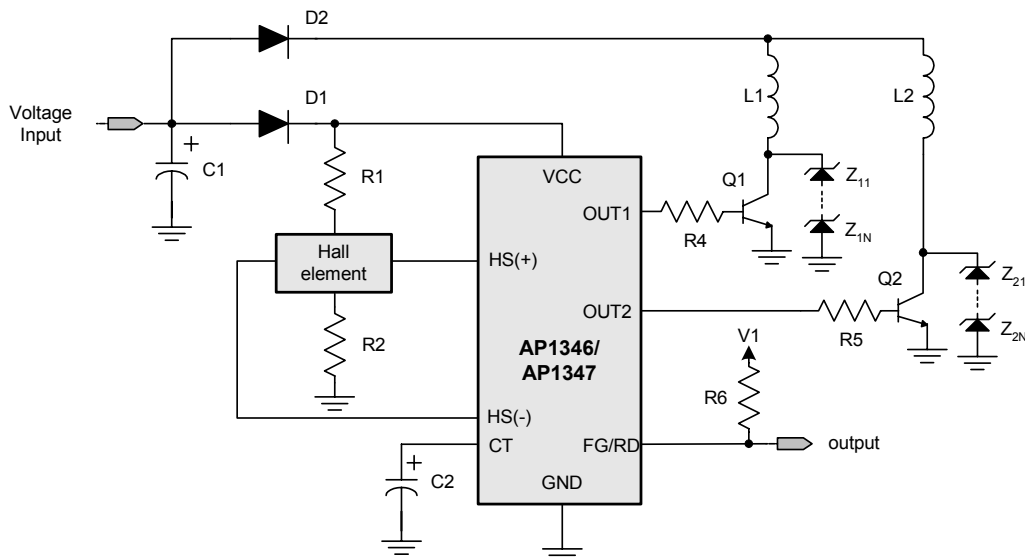
AP1346/1347

Two Coil Fan Motor Predriver

■ Block Diagram



■ Application Circuit



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■ Absolute Maximum Ratings (T_A=25°C)

| Parameter | Symbol | Rating | Unit |
|-----------------------------|------------------|-------------|------|
| Input voltage | V _{CC} | 30 | V |
| Output current | I _{OUT} | 70 | mA |
| Allowable power dissipation | P _D | 550*(note1) | mW |
| Operating temperature | T _{OPR} | -30 to +85 | °C |
| Storage temperature | T _{STG} | -55 to +125 | °C |

*note1 : Reduced by 5.5mW for each increase in Ta of 1°C over 25 °C

■ Electrical Characteristics (T_A=25°C, V_{CC}=12V, unless otherwise noted)

| Parameter | Symbol | Conditions | Rating | | | Unit |
|-----------------------------------|-------------------------------------|---|--------|------|----------------------|------|
| | | | Min. | Typ. | Max. | |
| Input voltage | V _{IN} | | 4 | -- | 28 | V |
| Hall input voltage (DC+AC) | V _{BH} | Includes the amplitude of signal | 1 | -- | V _{CC} -0.5 | V |
| Supply current | I _{CC} | The output is off | -- | 4 | 5.5 | mA |
| Hall amp input hysteresis (+) | V _{HYS+} | Delta V when V _{BH} =6V | 3 | -- | 15 | mV |
| Hall amp input hysteresis (-) | V _{HYS-} | Delta V when V _{BH} =6V | -15 | -- | -3 | mV |
| Charge current | I _{CHG} | V _{CT} = 1.5V | 7.7 | 9.6 | 11.5 | uA |
| Discharge current | I _{DHG} | V _{CT} = 1.5V | 0.19 | 0.24 | 0.29 | uA |
| Charge/discharge ratio | R _{CD} | I _{CHG} /I _{DCHG} | 32 | 40 | 48 | -- |
| Clamp voltage | V _{CL} | | 1.6 | 2.0 | 2.4 | V |
| Comparator voltage | V _{CP} | | 0.8 | 1.0 | 1.2 | V |
| Output high level | V _{OH} | I _O = 10mA | 10 | 10.5 | -- | V |
| FG / RD pin output low | V _{FGL} / V _{RDL} | I _{FG} = 5mA / I _{RD} = 5mA | -- | -- | 0.5 | V |
| FG / RD pin sink current capacity | I _{FG} / I _{RD} | V _{FGL} = 2V / V _{RDL} = 2V | 8 | -- | -- | mA |

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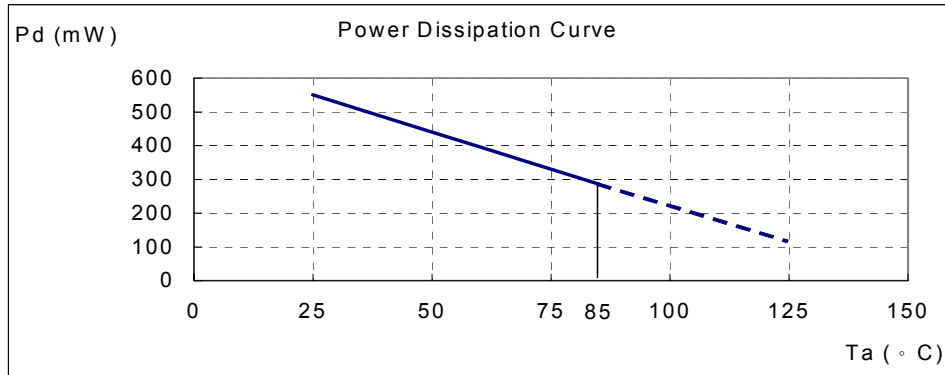


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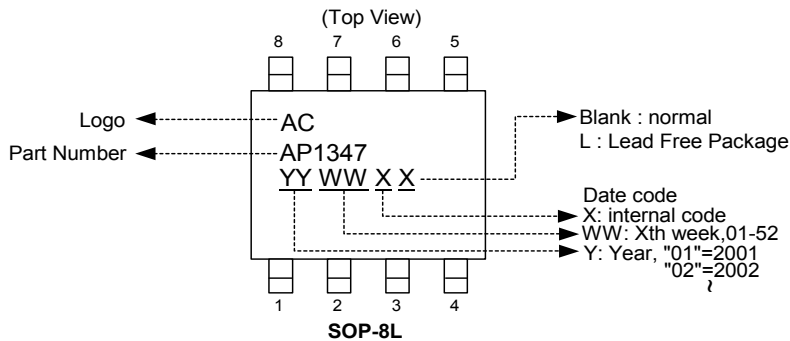
■ Performance Characteristics

| | | | | | | | |
|---------|-----|-----|-----|-----|-----|-----|-----|
| Ta (°C) | 25 | 50 | 60 | 70 | 80 | 85 | 90 |
| Pd (mW) | 550 | 440 | 396 | 352 | 308 | 286 | 264 |
| Ta (°C) | 95 | 100 | 105 | 110 | 115 | 120 | 125 |
| Pd (mW) | 242 | 220 | 198 | 176 | 154 | 132 | 110 |



Note : SOP-8L package.

■ Marking Information



Note: For AP1346, part number is marked as AP1346.

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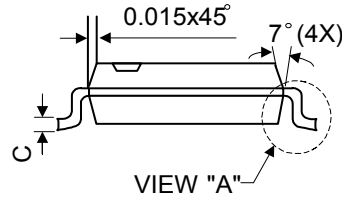
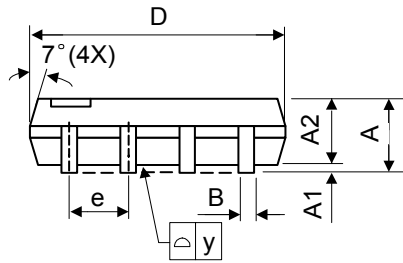
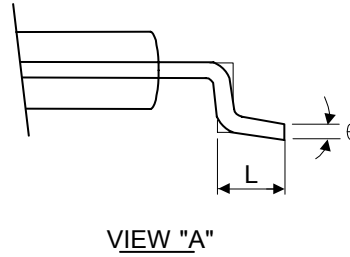
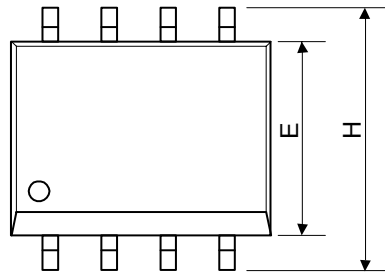


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■ Package Information

Package Type: SOP-8L



| Symbol | Dimensions In Millimeters | | | Dimensions In Inches | | |
|--------|---------------------------|------|------|----------------------|-------|-------|
| | Min. | Nom. | Max. | Min. | Nom. | Max. |
| A | 1.40 | 1.60 | 1.75 | 0.055 | 0.063 | 0.069 |
| A1 | 0.10 | - | 0.25 | 0.040 | - | 0.100 |
| A2 | 1.30 | 1.45 | 1.50 | 0.051 | 0.057 | 0.059 |
| B | 0.33 | 0.41 | 0.51 | 0.013 | 0.016 | 0.020 |
| C | 0.19 | 0.20 | 0.25 | 0.0075 | 0.008 | 0.010 |
| D | 4.80 | 5.05 | 5.30 | 0.189 | 0.199 | 0.209 |
| E | 3.70 | 3.90 | 4.10 | 0.146 | 0.154 | 0.161 |
| e | - | 1.27 | - | - | 0.050 | - |
| H | 5.79 | 5.99 | 6.20 | 0.228 | 0.236 | 0.244 |
| L | 0.38 | 0.71 | 1.27 | 0.015 | 0.028 | 0.050 |
| y | - | - | 0.10 | - | - | 0.004 |
| θ | 0° | - | 8° | 0° | - | 8° |