

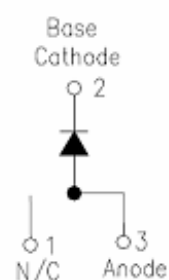
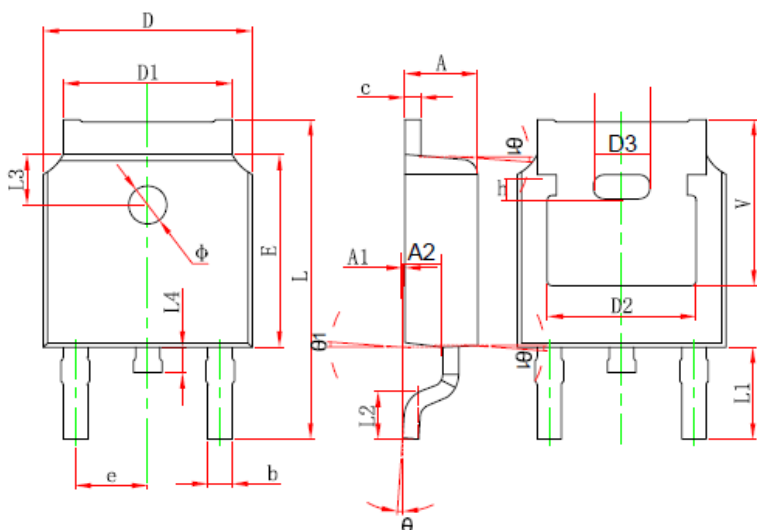
HD860 ULTRAFAST PLASTIC RECTIFIER

Features:

- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request


Mechanical Data:

- Case: Molded Plastic
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208
- Weight: 0.39 grams (approx.)
- Marking: Type Number
- Mounting Position: Any

HD860

Mechanical Dimensions: In mm /Inches


| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|---------|---------------------------|--------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 2.200 | 2.380 | 0.087 | 0.094 |
| A10.000 | 0.000 | 0.100 | 0.000 | 0.004 |
| b | 0.710 | 0.810 | 0.028 | 0.032 |
| c | 0.460 | 0.560 | 0.018 | 0.022 |
| D | 6.500 | 6.700 | 0.256 | 0.264 |
| D1 | 5.130 | 5.460 | 0.202 | 0.215 |
| D2 | 4.830 REF. | | 0.190 REF. | |
| E | 6.000 | 6.200 | 0.236 | 0.244 |
| e | 2.186 | 2.386 | 0.086 | 0.094 |
| L | 9.800 | 10.400 | 0.386 | 0.409 |
| L1 | 2.900 REF. | | 0.114 REF. | |
| L2 | 1.400 | 1.700 | 0.055 | 0.067 |
| L3 | 1.600 REF. | | 0.063 REF. | |
| L4 | 0.600 | 1.000 | 0.024 | 0.039 |
| Φ | 1.100 | 1.300 | 0.043 | 0.051 |
| θ | 0° | 8° | 0° | 8° |
| A2 | 0.910 | 1.110 | 0.036 | 0.044 |
| V | 5.350 REF. | | 0.211 REF. | |
| D3 | 1.778 REF. | | 0.070 REF. | |
| h | 0.762 REF. | | 0.030 REF. | |
| θ1 | 7° | | 7° | |

DPAK
MARKING, MOLDING RESIN

Marking for HD860, 1st row HL, 2nd row AH0 LXX, 3rd row HD860
 Where XX is Determined by customer

Ordering Information:

| Device | Package | Shipping |
|--------|--------------------|----------------|
| HD860 | DDPAK (Pb-Free) | 2500pcs / reel |

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| Characteristic | Symbol | HD860 | Unit |
|---|---------------------------------|-------------|--------------------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V_{RRM} V_{RWM} V_R | 600 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 420 | V |
| Average Rectified Output Current @ $T_A = 100^{\circ}\text{C}$ | I_o | 8.0 | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 110 | A |
| Forward Voltage (per element) @ $I_F = 8.0\text{A}$, $T_J = 25^{\circ}\text{C}$ | V_{FM} | 1.7 | V |
| Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^{\circ}\text{C}$ | I_{RM} | 5.0 50 | μA |
| Maximum Reverse Recovery Time (Note 1) | T_{rr} | 50 | ns |
| Max. Voltage Rate of Change | dv/dt | 10,000 | V/ μs |
| Typical Thermal Resistance Junction to Ambient (Note 2) | $R_{\theta JA}$ | 25 | K/W |
| Storage Temperature Range | T_{STG} , T_J | -55 to +150 | $^{\circ}\text{C}$ |
| Case Style | DDPAK | | |

- Note:**
- Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$
 - Mount on Cu-Pad Size 16mm×16mm on P.C.B.

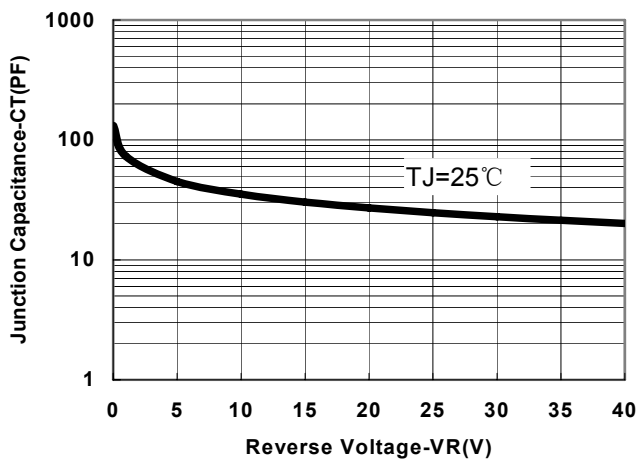


Fig.1-Typical Junction Capacitance

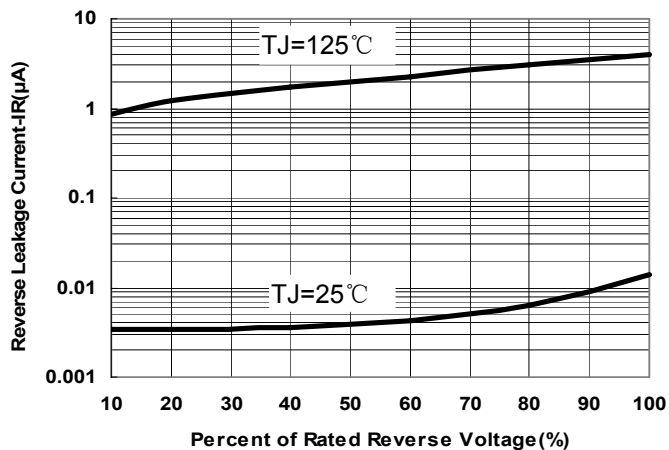


Fig.2-Typical Reverse Characteristics

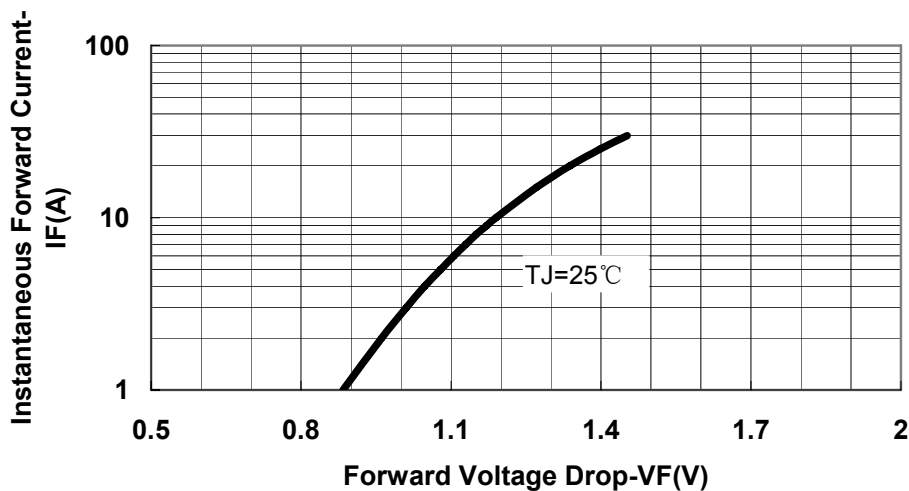


Fig.3-Typical Forward Voltage Drop Characteristics

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