



# H1N5817 thru H1N5819

1.0 AMP. SCHOTTKY BARRIER RECTIFIERS

## Features

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

## Maximum Ratings

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

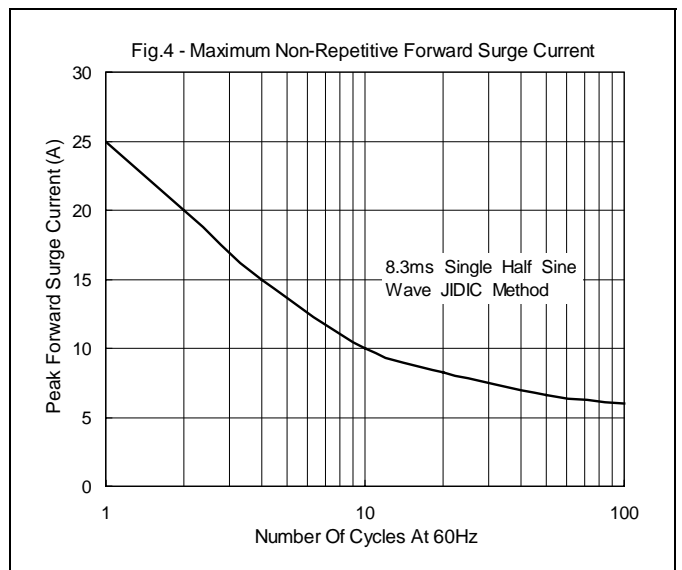
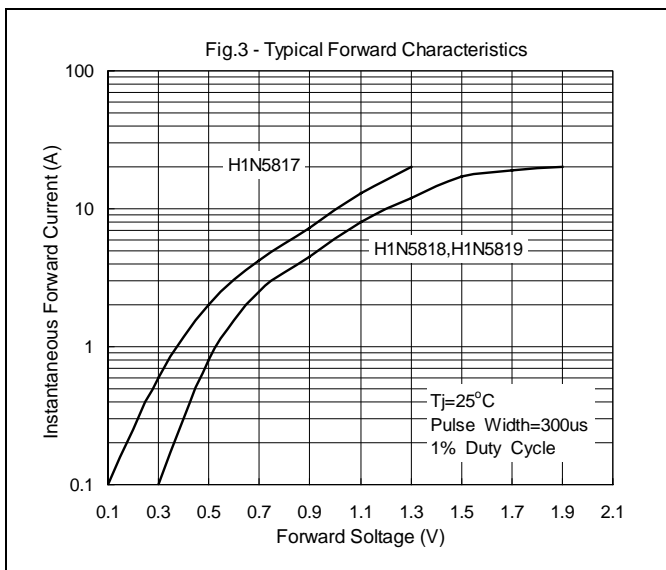
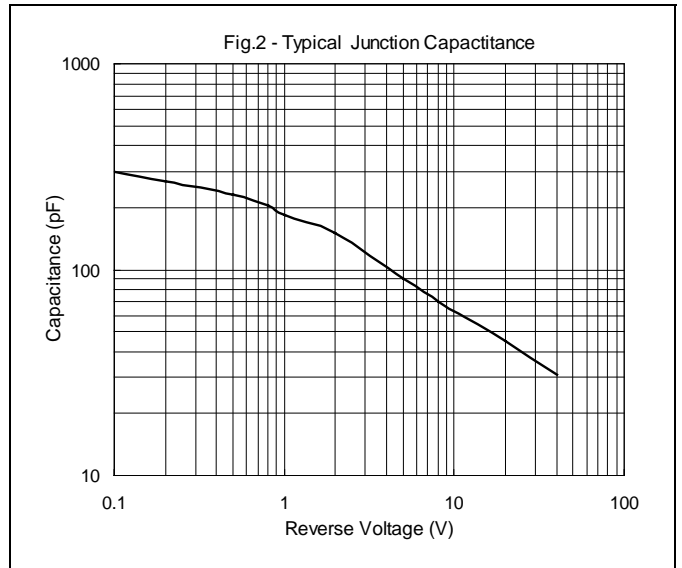
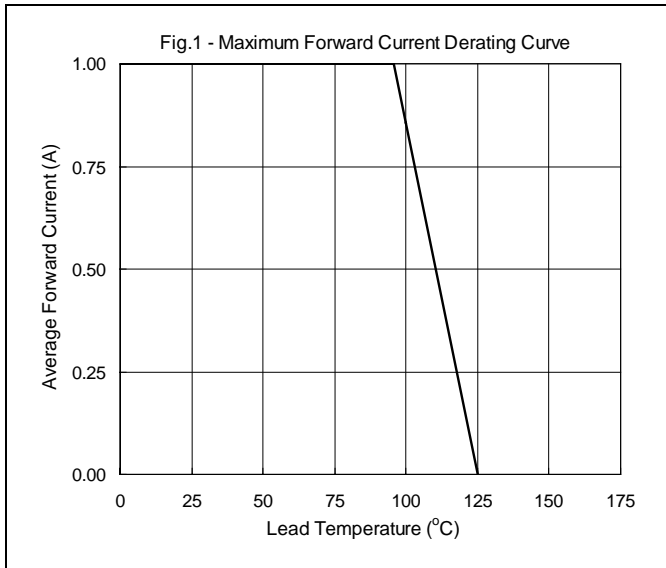
| Type Number   | H1N5817                          | H1N5818 | H1N5819 | Units    |
|---|----------------------------------|---------|---------|----------|
| Maximum Recurrent Peak Reverse Voltage  | 20                               | 30      | 40      | V        |
| Maximum RMS Voltage   | 14                               | 21      | 28      | V        |
| Maximum DC Blocking Voltage   | 20                               | 30      | 40      | V        |
| Maximum Average Forward Rectified Current<br>0.375"(9.5mm) Lead Length @ TL=90°C                        | 1                                |         |         | A        |
| Peak Forward Surge Current, 8.3ms Single Half<br>Sine-wave Superimposed on Rated Load (JEDEC<br>method) | 25                               |         |         | A        |
| Maximum Instantaneous Forward Voltage @ 1A  | 0.45                             | 0.550   | 0.600   | V        |
| Maximum Instantaneous Forward Voltage @ 3A  | 0.750                            | 0.875   | 0.900   | V        |
| Maximum DC Reverse Current At Rated DC<br>Blocking Voltage  | 1 (@ Ta=25°C)<br>10 (@ Ta=100°C) |         |         | mA<br>mA |
| Typical Thermal Resistance (Note 1) R $\theta$ JA   | 50                               |         |         | °C /W    |
| Typical Junction Capacitance (Note 2)   | 110                              |         |         | pF       |
| Operating Temperature Range Tj  | -65 to +125                      |         |         | °C       |
| Storage Temperature Range TSTG  | -65 to +125                      |         |         | °C       |

Note 1: Thermal resistance from junction to ambient vertical PC Board Mounting, 0.375"(9.5mm) lead length.

Note 2: Measured at 1Mhz and applied reverse voltage of 4V D.C.

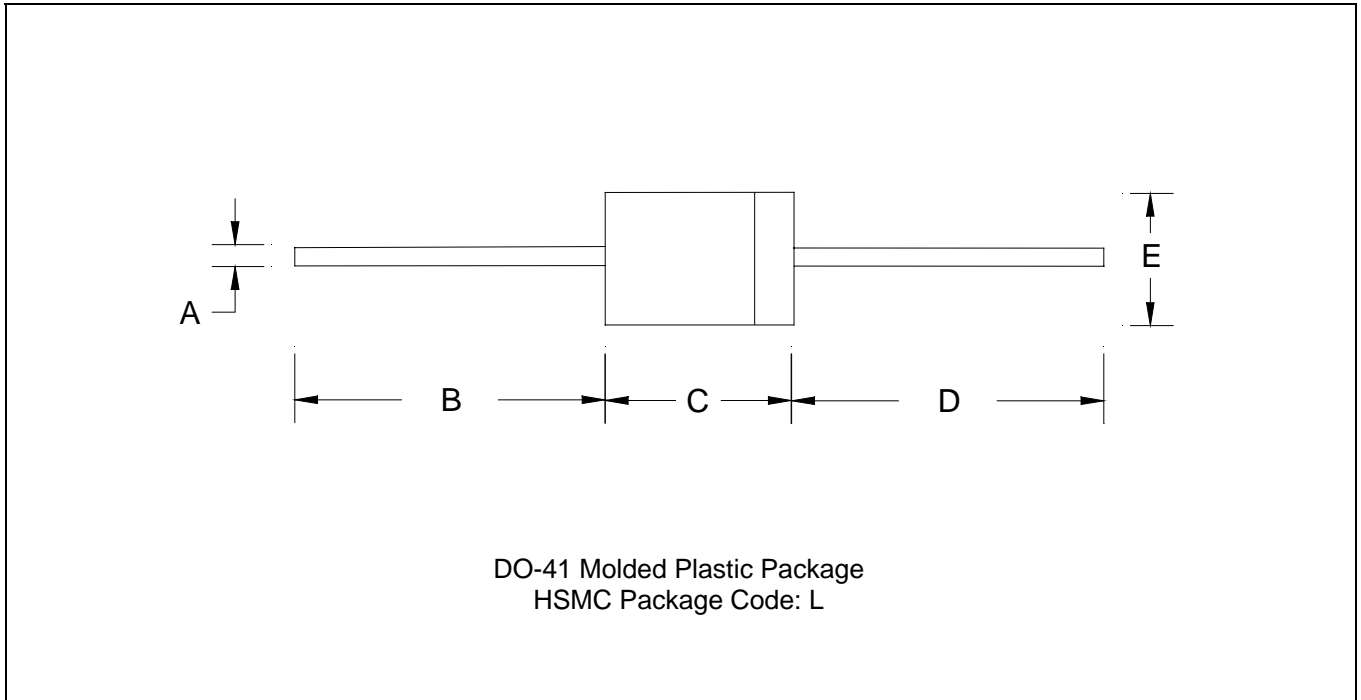


### Characteristics Curve





### DO-41 Dimension



\*: Typical

| DIM | Inches |        | Millimeters |      | DIM | Inches |        | Millimeters |      |
|-----|--------|--------|-------------|------|-----|--------|--------|-------------|------|
|     | Min.   | Max.   | Min.        | Max. |     | Min.   | Max.   | Min.        | Max. |
| A   | 0.0280 | 0.0340 | 0.71        | 0.86 | D   | 1.0000 | -      | 25.40       | -    |
| B   | 1.0000 | -      | 25.40       | -    | E   | 0.0800 | 0.1070 | 2.00        | 2.70 |
| C   | 0.1600 | 0.2050 | 4.10        | 5.20 |     |        |        |             |      |

**Notes:** 1.Dimension and tolerance based on our Spec. dated May 28,1998.  
 2.Controlling dimension: millimeters.  
 3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.  
 4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

**Material:**

- Lead: 42 Alloy ; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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