



# 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 0.375"(9.5mm) Lead Length @ TL=90°C	1			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC 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 Blocking Voltage	1 (@ Ta=25°C) 10 (@ Ta=100°C)			mA 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

Fig.1 - Maximum Forward Current Derating Curve

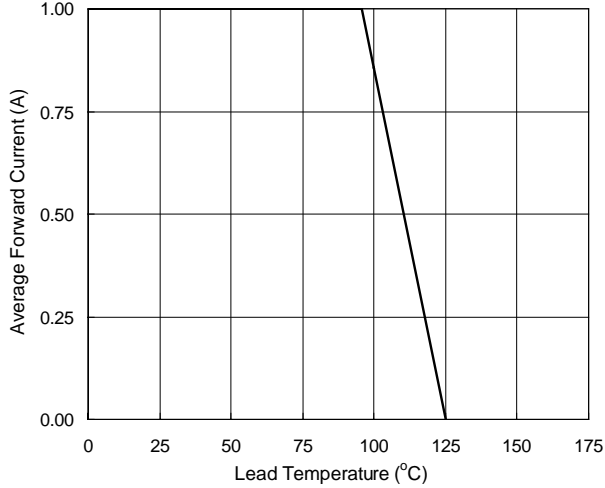


Fig.2 - Typical Junction Capacitance

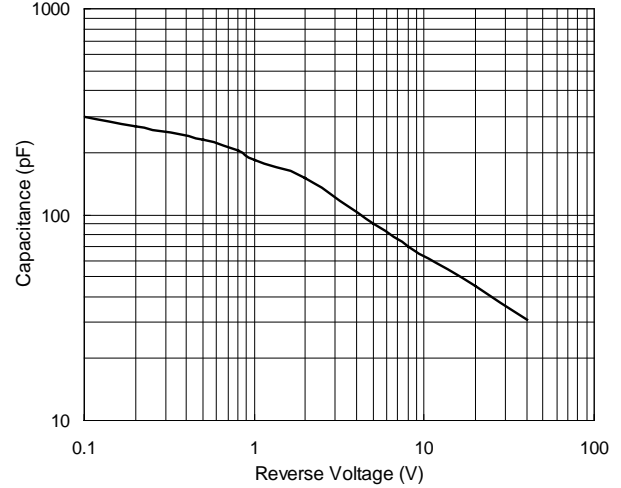


Fig.3 - Typical Forward Characteristics

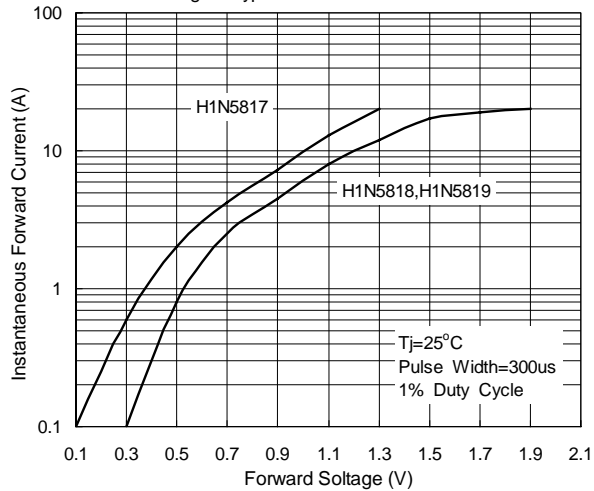
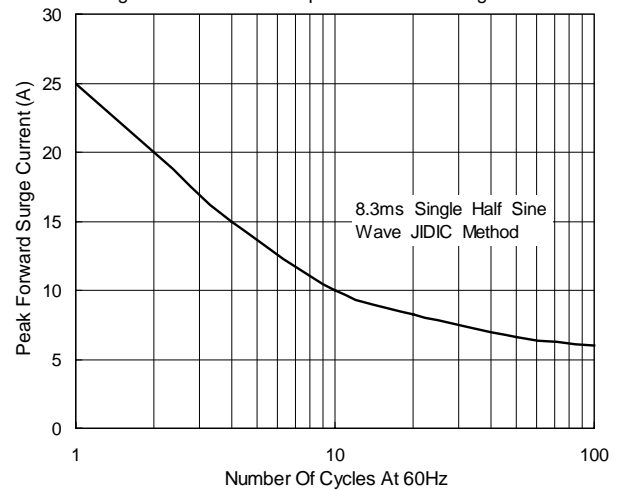
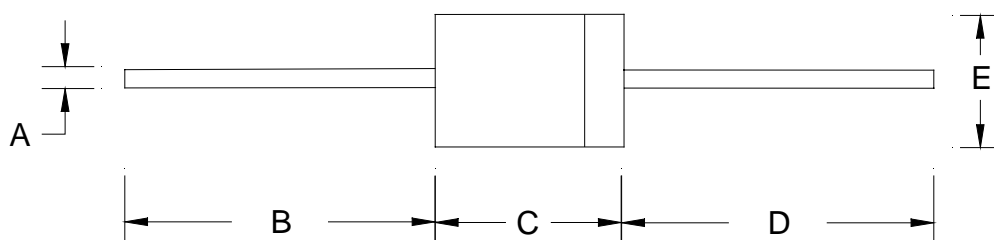


Fig.4 - Maximum Non-Repetitive Forward Surge Current





### DO-41 Dimension



DO-41 Molded Plastic Package  
HSMC Package Code: L

\*: 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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#### Head Office And Factory:

- **Head Office** (Hi-Sincerity Microelectronics Corp.): 10F.,No. 61, Sec. 2, Chung-Shan N. Rd. Taipei Taiwan R.O.C.  
Tel : 886-2-25212056 Fax : 886-2-25632712, 25368454
- **Factory 1:** No. 38, Kuang Fu S. Rd., Fu-Kou Hsin-Chu Industrial Park Hsin-Chu Taiwan. R.O.C  
Tel: 886-3-5983621~5 Fax: 886-3-5982931