LITE-ON
LITE-ON SEMICONDUCTOR

SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **100** to **1000** Volts
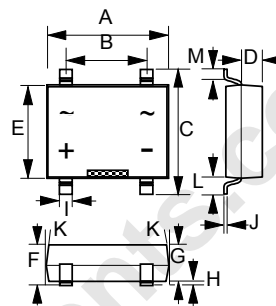FORWARD CURRENT - **0.8** Amperes

FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL recognition File # E95060

MECHANICAL DATA

- Polarity : Symbol molded on body
- Weight : 0.0044 ounces, 0.125 grams
- Mounting position : Any

HDDF

DIM.	MIN.	MAX.
A	4.50	4.90
B	2.30	2.70
C	–	7.00
D	1.20	1.60
E	3.60	4.00
F	–	3.00
G	2.30	2.70
H	–	0.20
I	0.50	0.80
J	0.15	0.35
K	5° TYPICAL	
L	1.30	1.70
M	0.70	1.10

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	HD01	HD02	HD04	HD06	HD08	HD10	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (Note 1) @TA=40℃	$I_{(AV)}$	0.8						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I_{FSM}	30						A
MaximumForward Voltage at 0.4A DC	V_F	1						V
Maximum DC Reverse Current @TJ=25℃ at Rated DC Blocking Voltage @TJ=125℃	I_R	5 500						uA
I²t Rating for fusing (t < 8.3ms)	I²t	3.7						A²S
Typical Junction Capacitance per element (Note 2)	C_J	15						pF
Typical Thermal Resistance (Note 3)	$R_{θ JA}$	75						℃/W
Operating Temperature Range	T_J	-55 to + 150						℃
Storage Temperature Range	T_{STG}	-55 to + 150						℃

NOTES : 1.Mounted on P.C. board.
2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3.Thermal Resistance Junction to Ambient.

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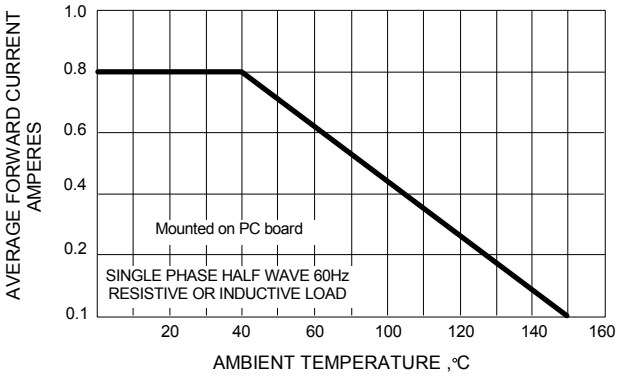**LITEON**

FIG.1 - FORWARD CURRENT DERATING CURVE

AVERAGE FORWARD CURRENT AMPERES

Mounted on PC board

SINGLE PHASE HALF WAVE 60Hz
RESISTIVE OR INDUCTIVE LOAD

AMBIENT TEMPERATURE ,℃

FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

PEAK FORWARD SURGE CURRENT, AMPERES

Pulse width 8.3ms
Single Half-Sine-Wave
(JEDEC METHOD)

NUMBER OF CYCLES AT 60Hz

FIG.3 - TYPICAL JUNCTION CAPACITANCE

CAPACITANCE , (pF)

$T_J = 25°C$, f= 1MHz

REVERSE VOLTAGE, VOLTS
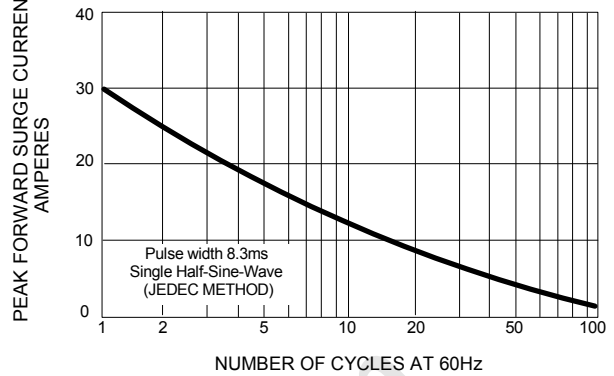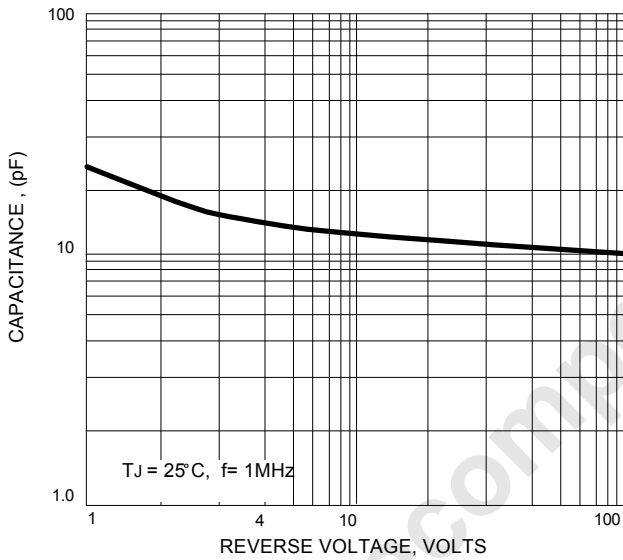
FIG.4 - TYPICAL FORWARD CHARACTERISTICS

INSTANTANEOUS FORWARD CURRENT , (A)

$T_J = 25°C$

PULSE WIDTH 300us

INSTANTANEOUS FORWARD VOLTAGE , VOLTS
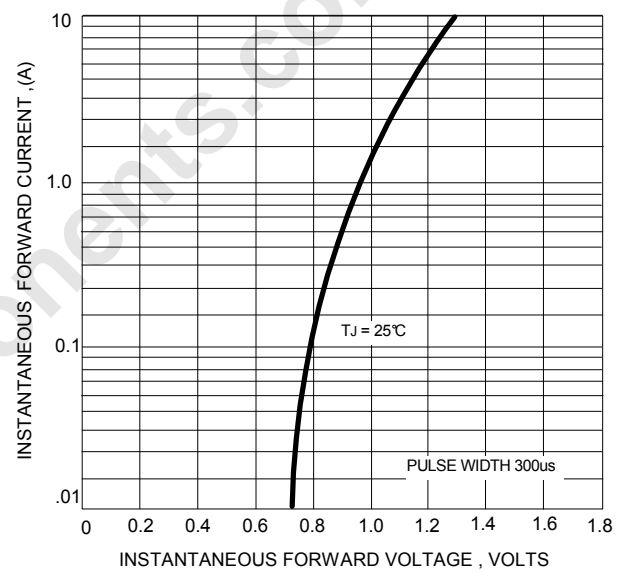
FIG.5 - TYPICAL REVERSE CHARACTERISTICS

INSTANTANEOUS FORWARD CURRENT , (mA)

$T_J = 125°C$

$T_J = 25°C$

PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)

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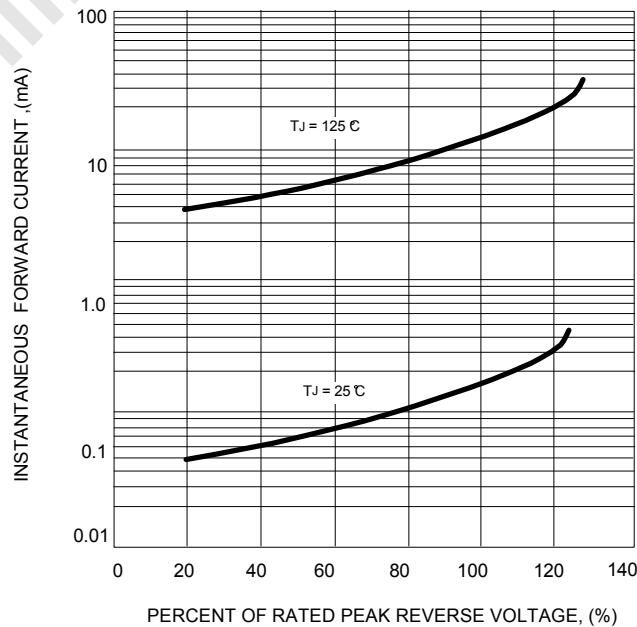
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