

**SURFACE MOUNT
GLASS PASSIVATED BRIDGE RECTIFIERS**

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

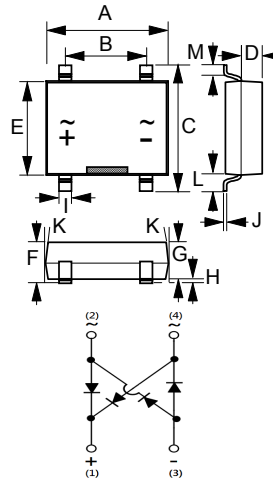
FEATURES

- 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 : 130 mg (Approximate)
- Mounting position : Any

HDDF



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 dimension in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER	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 (Note1) @ $T_A=40^\circ C$	$I_{(AV)}$	0.8						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load.	I_{FSM}	30						A
I^2t rating for fusing ($t < 8.3ms$)	I^2t	3.7						A ² S
Operating junction temperature range	T_J	-55 to +150						°C
Storage temperature range	T_{STG}	-55 to +150						°C

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITIONS		SYMBOL	MAX	UNIT
Forward voltage	$I_F=0.4A$	$T_J=25^\circ C$	V_F	1.0	V
Leakage current	VR rated	$T_J=25^\circ C$ $T_J=125^\circ C$	I_R	5.0 500	uA
Typical junction capacitance (Note2)			C_J	15	pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP.	UNIT
Typical thermal resistance (Note3)	R_{thJA}	52	°C/W

Note :

- (1) Mounted on P.C.B.
- (2) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- (3) Thermal resistance junction to ambient.

**RATING AND CHARACTERISTIC CURVES
HD01 thru HD10**



FIG.1- FORWARD CURRENT DERATING CURVE

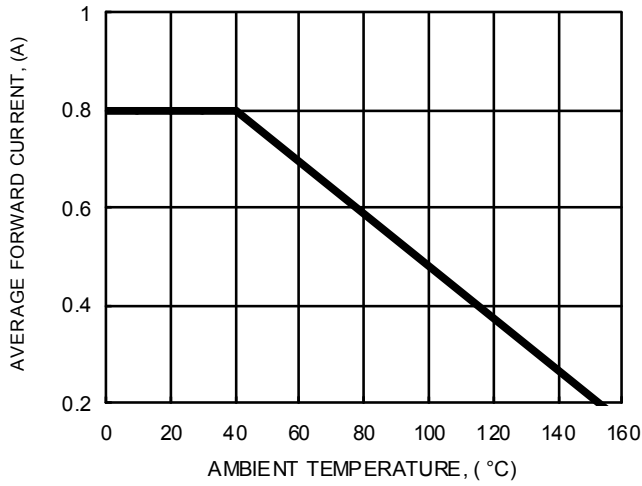


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

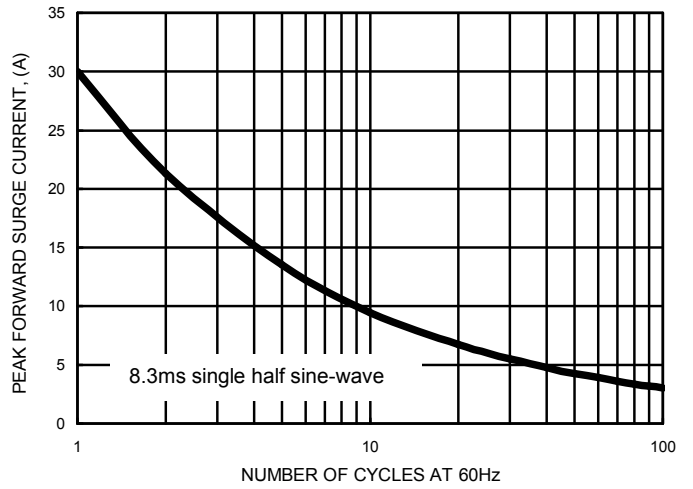


FIG.3- TYPICAL FORWARD CHARACTERISTICS

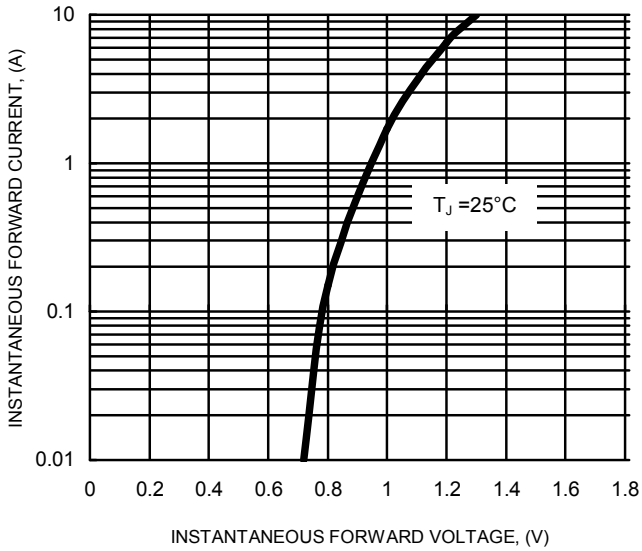


FIG.4- TYPICAL JUNCTION CAPACITANCE

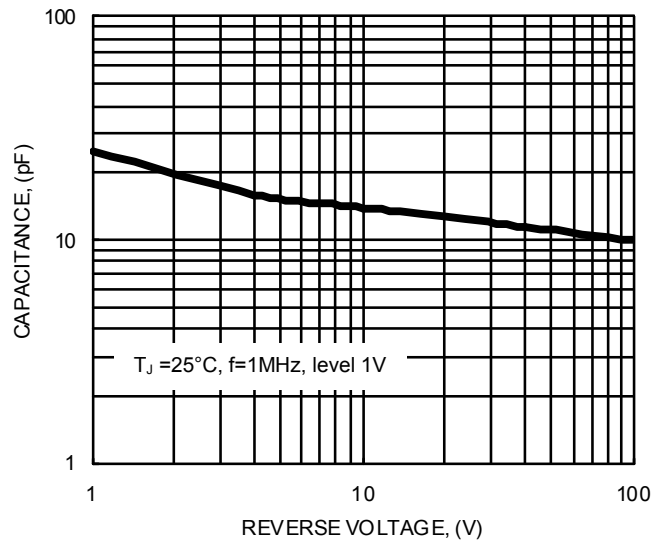
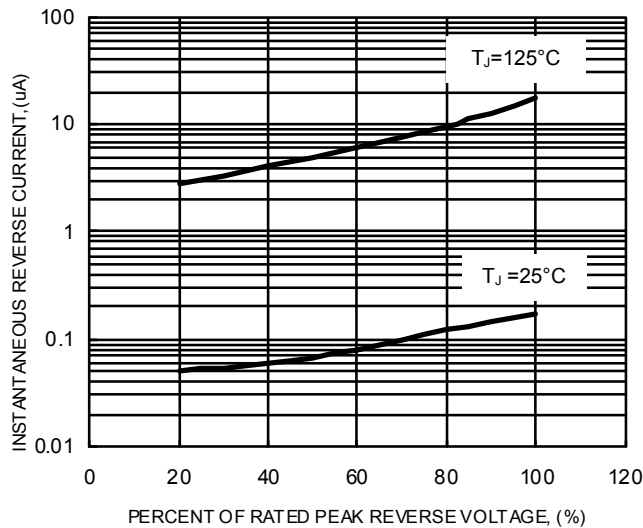


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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