

- Reliable low cost construction utilizing molded plastic technique
- High surge current capability
- Moisture sensitivity level : level 1, per J-STD-020
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



HDBLS

MECHANICAL DATA

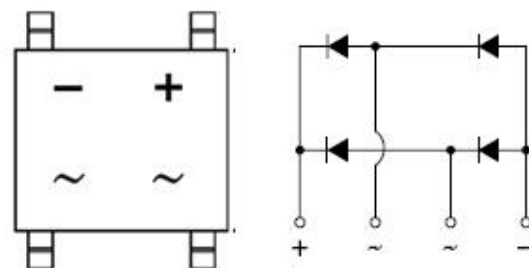
Case : Molded plastic body

Molding compound, UL flammability classification rating 94V-0
 Base P/N with suffix "G" on packing code - halogen-free, RoHS compliant

Terminal : Matte tin plated leads, solderable per JESD22-B102
 Meet JESD 201 class 1A whisker test

Polarity : Polarity as marked on the body

Weight : 0.36 gram (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	HDBLS	HDBLS	HDBLS	HDBLS	HDBLS	HDBLS
		101G	102G	103G	104G	105G	106G
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	
Maximum average forward rectified current	I _{F(AV)}	1					
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	50					
Maximum instantaneous forward voltage (Note 1) I _F = 1 A	V _F	1.0			1.3		
Maximum DC reverse current at rated DC blocking voltage T _J =25°C T _J =125°C	I _R	5				500	
Maximum reverse recovery time (Note 2)	T _{rr}	50					
Typical thermal resistance	R _{θJL} R _{θJA}	15				40	
Operating junction temperature range	T _J	- 55 to + 150					
Storage temperature range	T _{STG}	- 55 to + 150					

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle

Notes 2: Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
HDBLS107G RD	HDBLS107G	RD		
HDBLS107G RDG	HDBLS107G	RD	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

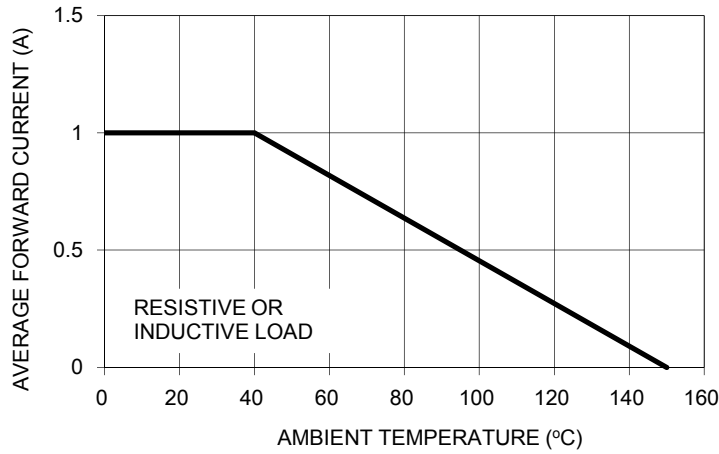


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

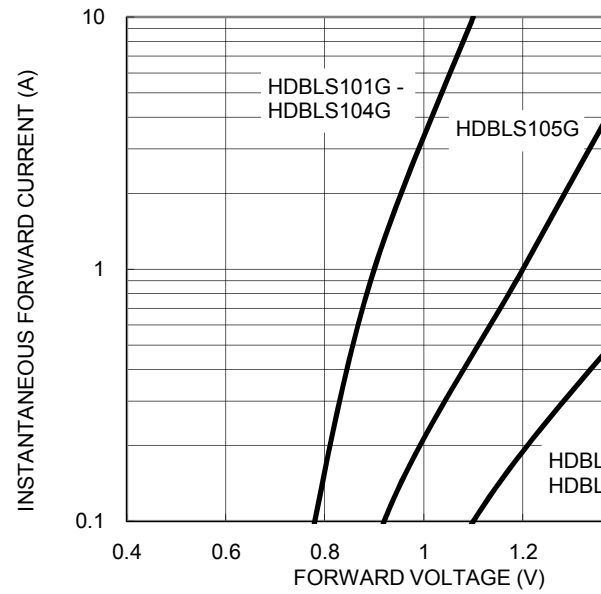


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

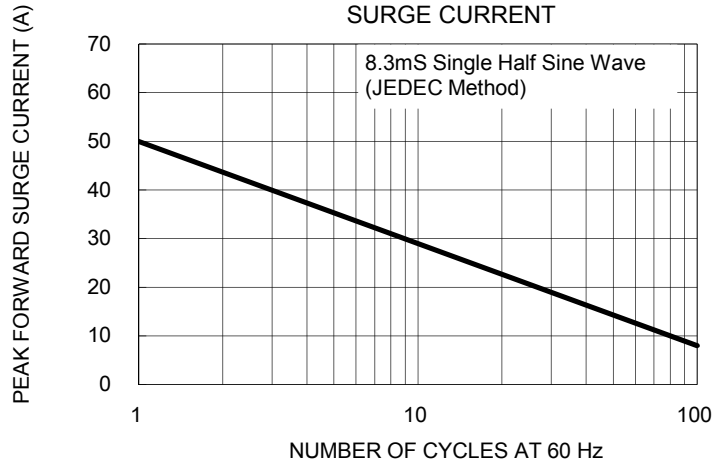
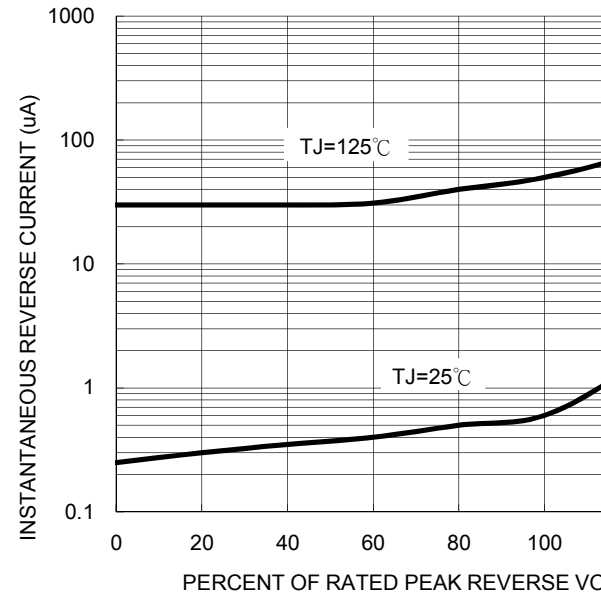
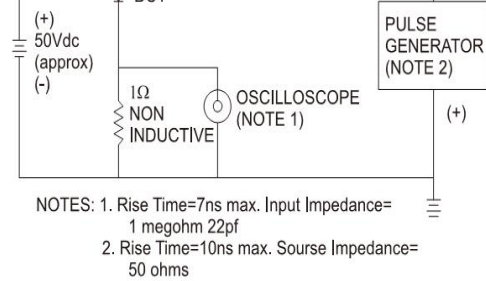
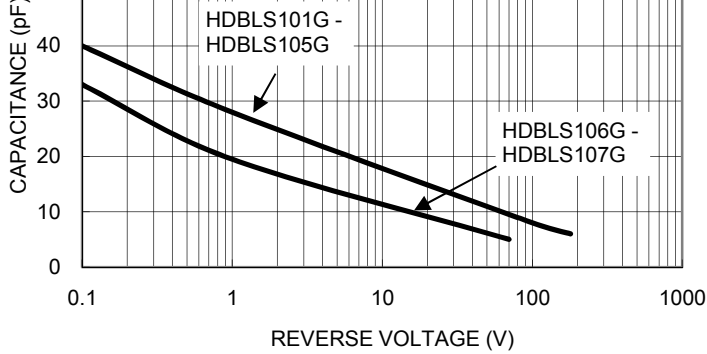
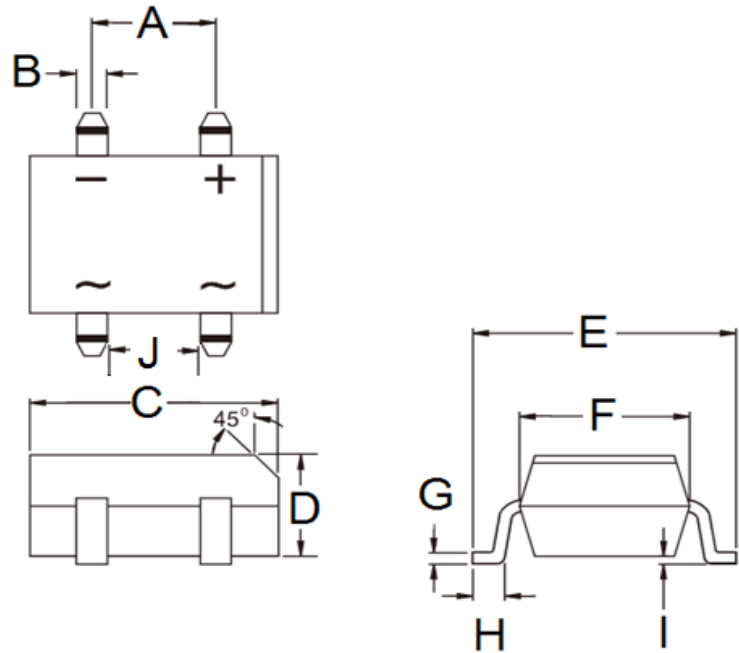


FIG. 4 TYPICAL REVERSE CHARACTERISTICS



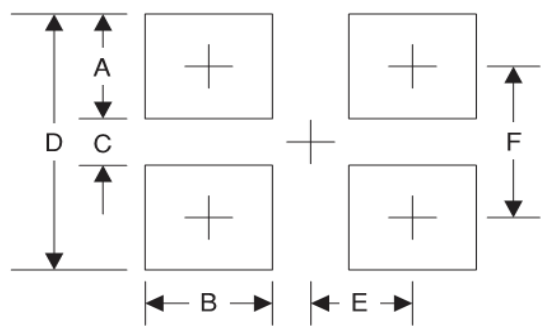


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit(mm)		Unit
	Min	Max	
A	5.00	5.20	0.197
B	1.02	1.20	0.040
C	8.13	8.51	0.320
D	2.40	2.60	0.094
E	9.80	10.30	0.386
F	6.20	6.50	0.244
G	0.22	0.33	0.009
H	1.02	1.53	0.040
I	0.076	0.33	0.003
J	3.90	4.10	0.154

SUGGESTED PAD LAYOUT



Symbol	Unit(mm)
A	2.3
B	1.3
C	6.9
D	11.5
E	2.6
F	9.2

MARKING DIAGRAM



- P/N = Specific Device Code
- G = Green Compound
- YW = Date Code
- F = Factory Code