

## Bridge Rectifiers

### Features

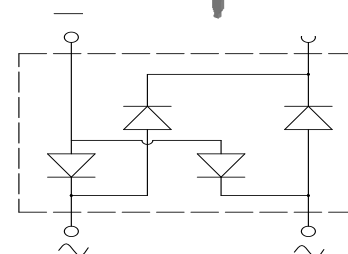
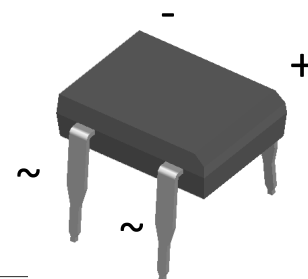
- UL recognition, file #E313149
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Typical Applications

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballast, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

### Mechanical Data

- **Package:** DBL  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, Halogen free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body



### ■ Maximum Ratings ( $T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DBL101	DBL102	DBL103	DBL104	DBL105	DBL106	DBL107
Device marking code			DBL101	DBL102	DBL103	DBL104	DBL105	DBL106	DBL107
Repetitive peak reverse voltage	$V_{RRM}$	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, $T_a=40^{\circ}\text{C}$	$I_O$	A	1.0						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, $T_j=25^{\circ}\text{C}$	$I_{FSM}$	A	30						
Current squared time @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_j=25^{\circ}\text{C}$ , Rating of per diode	$I^2t$	$\text{A}^2\text{s}$	3.7						
Storage temperature	$T_{stg}$	$^{\circ}\text{C}$	-55 ~ +150						
Junction temperature	$T_j$	$^{\circ}\text{C}$	-55 ~ +150						

### ■ Electrical Characteristics ( $T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	DBL101	DBL102	DBL103	DBL104	DBL105	DBL106	DBL107
Maximum instantaneous forward voltage drop per diode	$V_F$	V	$I_{FM}=0.5\text{A}$	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode @ $V_{RM}=V_{RRM}$	$I_{RRM}$	$\mu\text{A}$	$V_{RM}=V_{RRM}$	5						

**■ Thermal Characteristics** ( $T_a=25^{\circ}\text{C}$  Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DBL101	DBL102	DBL103	DBL104	DBL105	DBL106	DBL107
Thermal Resistance	$R_{\theta J-A(1)}$	$^{\circ}\text{C/W}$	68.0						
	$R_{\theta J-L}$		15.0						

Note

(1) Thermal resistance from Between junction and ambient, On glass-epoxi substrate.

**■ Ordering Information (Example)**

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DBL101~DBL107	B1	Approximate 0.37	50	2500	10000	Tube

**■ Characteristics (Typical)**

FIG1:Io-Ta Curve

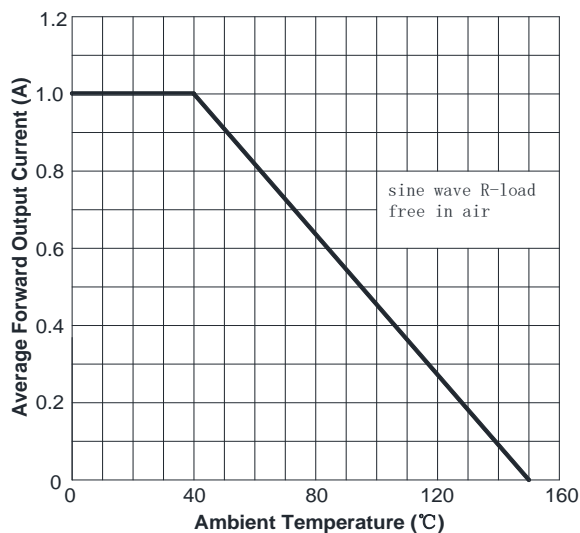


FIG2:Surge Forward Current Capability

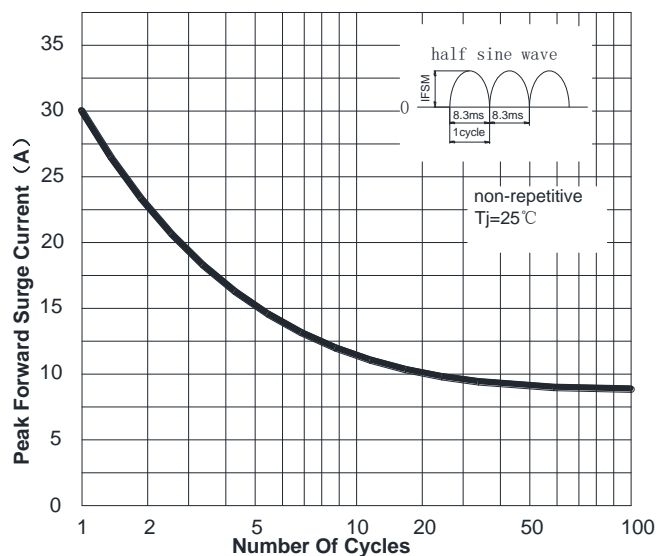


FIG3: Forward Voltage

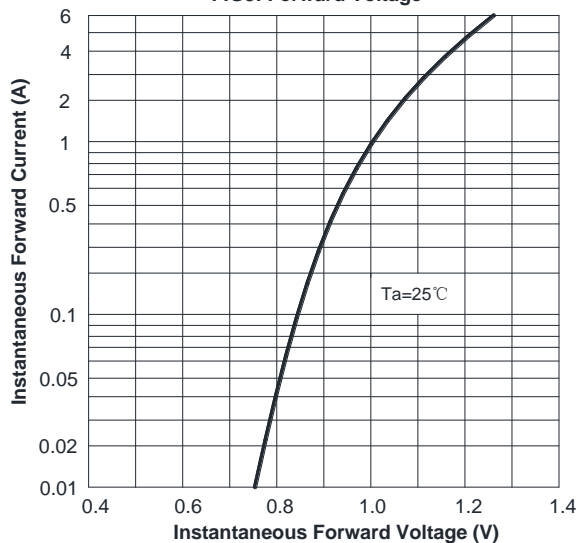
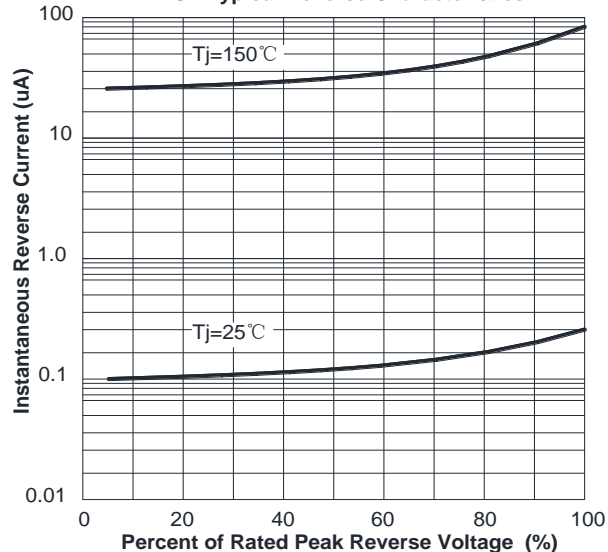
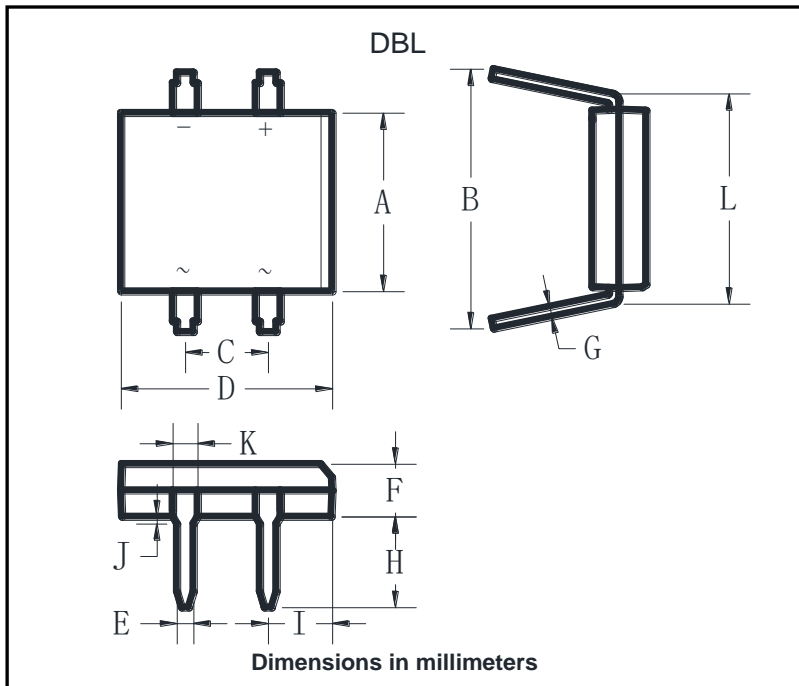


FIG4:Typical Reverse Characteristics



■ Outline Dimensions



Dim	DBL	
	Min	Max
A	6.20	6.50
B	7.60	8.90
C	5.00	5.20
D	8.13	8.51
E	0.46	0.58
F	2.35	2.45
G	0.22	0.33
H	3.81	4.69
I	1.39	1.90
J	1.27	2.03
K	0.89	1.14
L	7.24	8.00

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