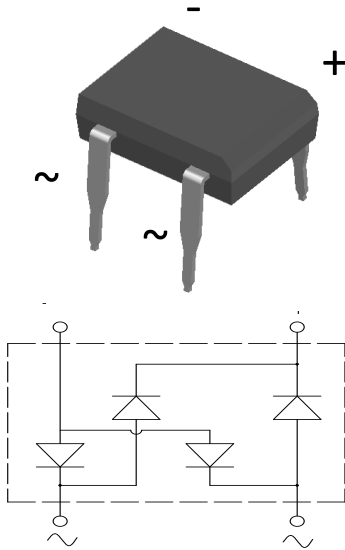


Bridge Rectifiers



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°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°C	I _O	A	1.0						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T _j =25°C	I _{FSM}	A	30						
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² s	3.7						
Storage temperature	T _{stg}	°C	-55 ~+150						
Junction temperature	T _j	°C	-55 ~+150						

■Electrical Characteristics (T_a=25°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} =0.5A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode @ V _{RM} =V _{RRM}	I _{RRM}	μA	V _{RM} =V _{RRM}	5						



DBL101 THRU DBL107

■ 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)	MINIMUM 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

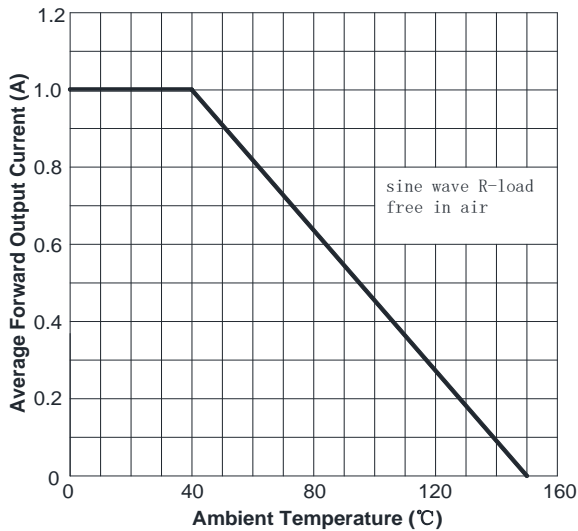


FIG2:Surge Forward Current Capability

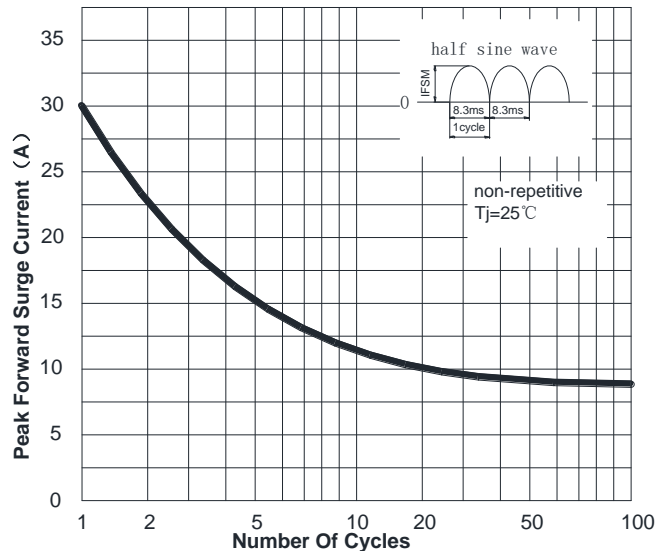


FIG3: Forward Voltage

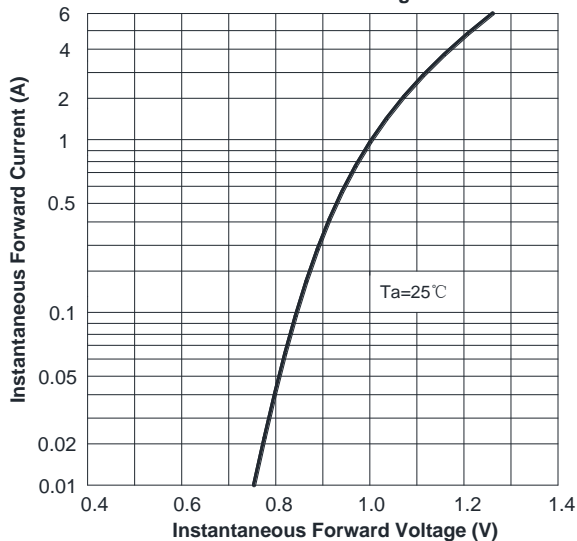
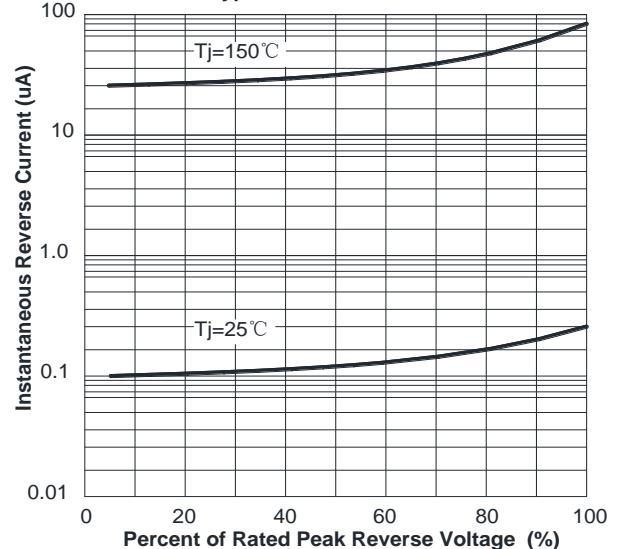


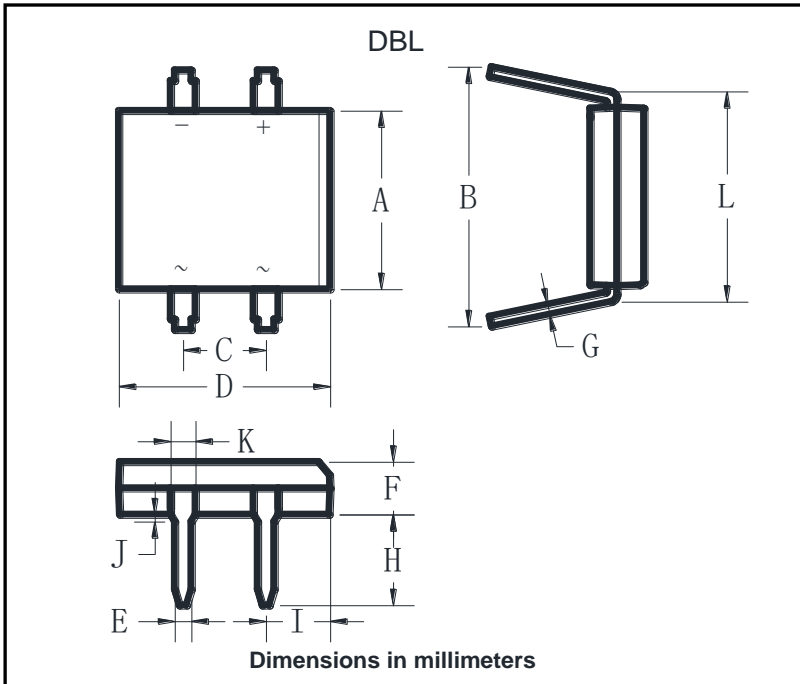
FIG4:Typical Reverse Characteristics





DBL101 THRU DBL107

■ Outline Dimensions



DBL		
Dim	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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