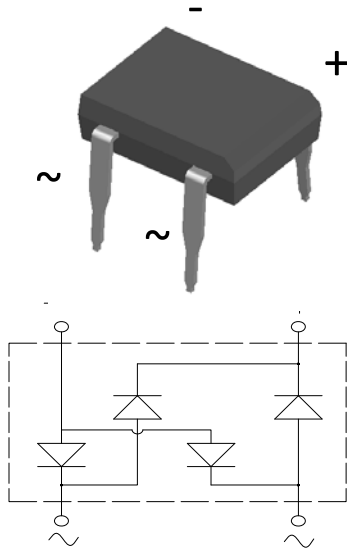


Bridge Rectifiers



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 ballaster, 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 (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DBL151	DBL152	DBL153	DBL154	DBL155	DBL156	DBL157
Device marking code			DBL151	DBL152	DBL153	DBL154	DBL155	DBL156	DBL157
Repetitive peak reverse voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, Ta=40°C	I_O	A	1.5						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, Tj=25°C	I_{FSM}	A	60						
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I^2t	A ² s	15						
Storage temperature	T_{stg}	°C	-55 ~+150						
Junction temperature	T_J	°C	-55 ~+150						

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	DBL151	DBL152	DBL153	DBL154	DBL155	DBL156	DBL157
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=0.7A$	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM}	μA	$V_{RM}=V_{RRM}$	5						

■Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DBL151	DBL152	DBL153	DBL154	DBL155	DBL156	DBL157
Thermal Resistance	$R_{\theta JA}^{(1)}$	°C/W	68.0						
	$R_{\theta JL}$		15.0						

Note

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



DBL151 THRU DBL157

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DBL151~DBL157	B1	Approximate 0.37	50	2500	10000	Tube

■ Characteristics (Typical)

FIG1:Io-Ta Curve

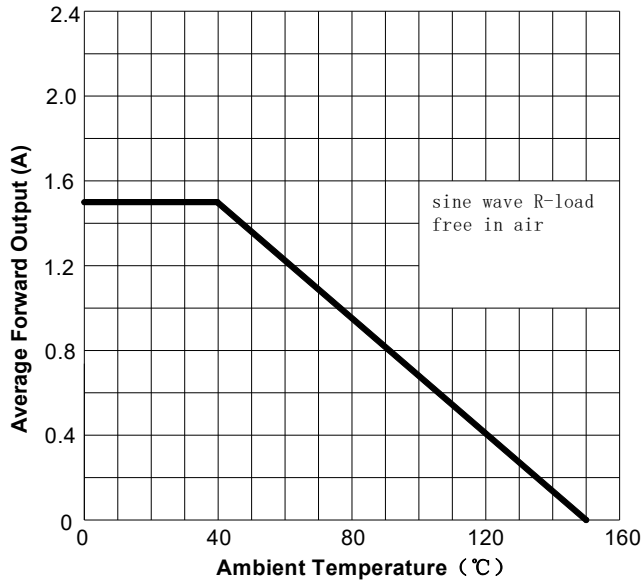


FIG2:Surge Forward Current Capability

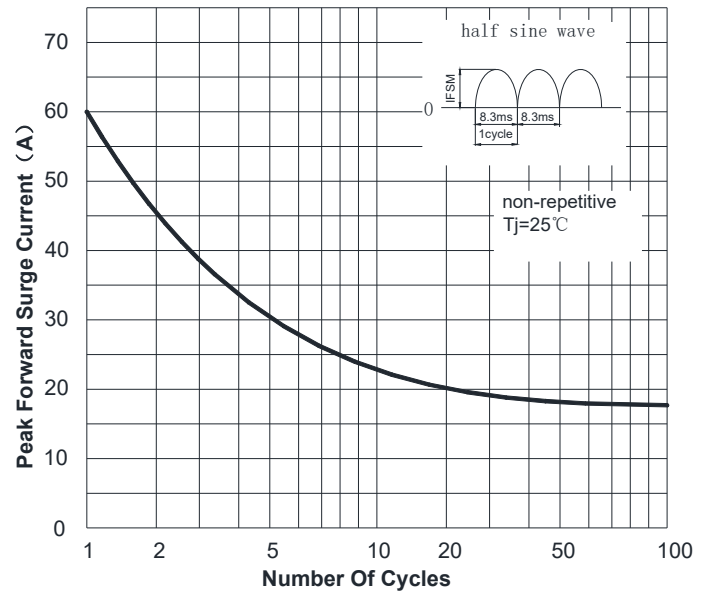


FIG3: Forward Voltage

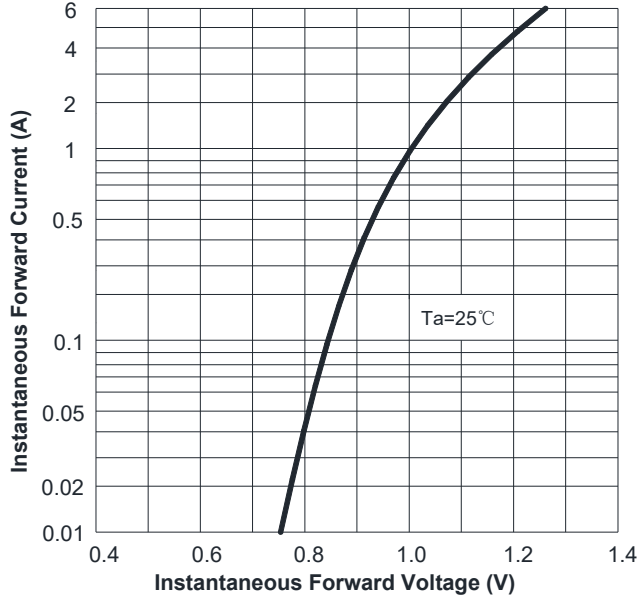
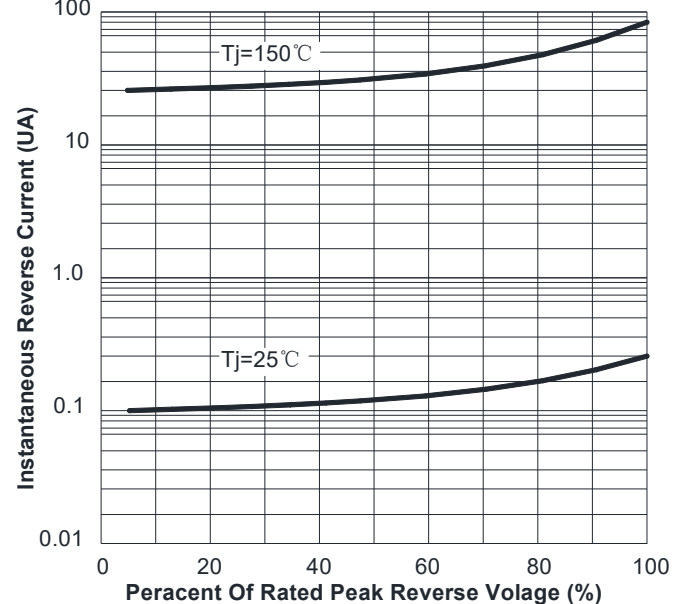


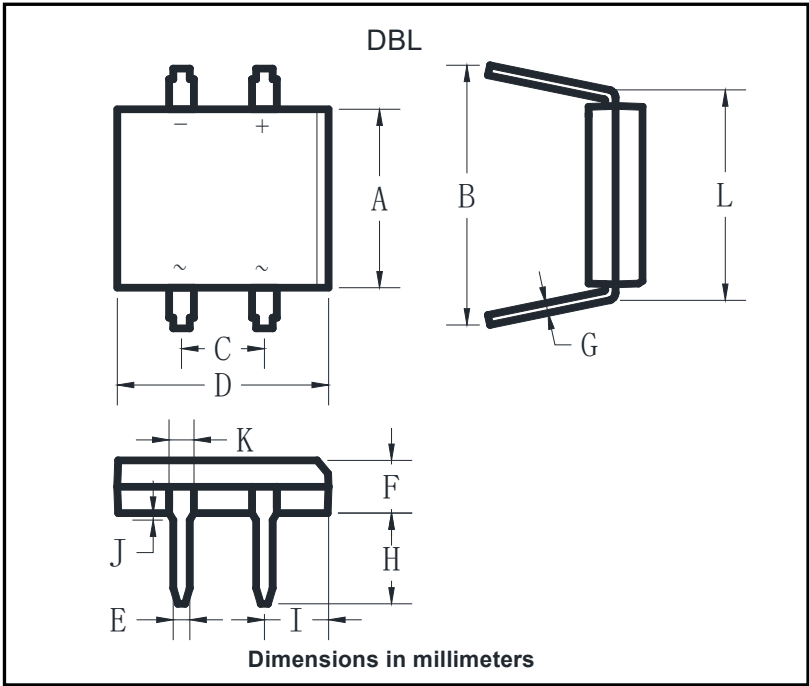
FIG4:Typical Reverse Characteristics





DBL151 THRU DBL157

■ 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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