

Bridge Rectifiers

Features

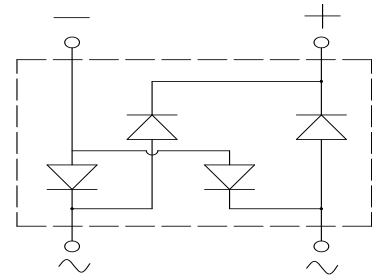
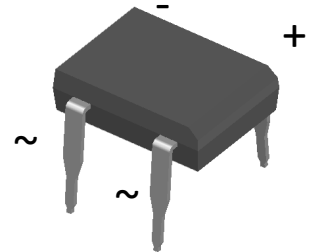
- UL recognition, file #E313149
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

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:** DB
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **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	DB151	DB152	DB153	DB154	DB155	DB156	DB157
Device marking code			DB151	DB152	DB153	DB154	DB155	DB156	DB157
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	1.5						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, $T_j=25^\circ\text{C}$	I_{FSM}	A	60						
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	A^2s	15						
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	DB151	DB152	DB153	DB154	DB155	DB156	DB157
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=0.7\text{A}$	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM}	μA	$V_{RM}=V_{RRM}$	5						

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

PARAMETER	SYMBOL	UNIT	DB151	DB152	DB153	DB154	DB155	DB156	DB157
Thermal Resistance	R θ J-A(1)	$^{\circ}\text{C/W}$	68.0						
	R θ J-L		15.0						

Note

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

■ **Ordering Information (Example)**

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DB151-DB157	B1	Approximate 0.39	50	2500	10000	Tube

■ **Characteristics (Typical)**

FIG1:Io-TaCurve

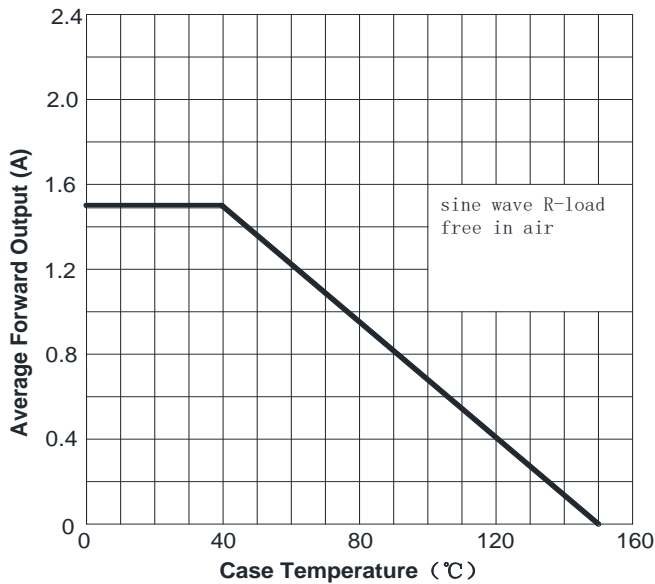


FIG2:Surge Forward Current Capability

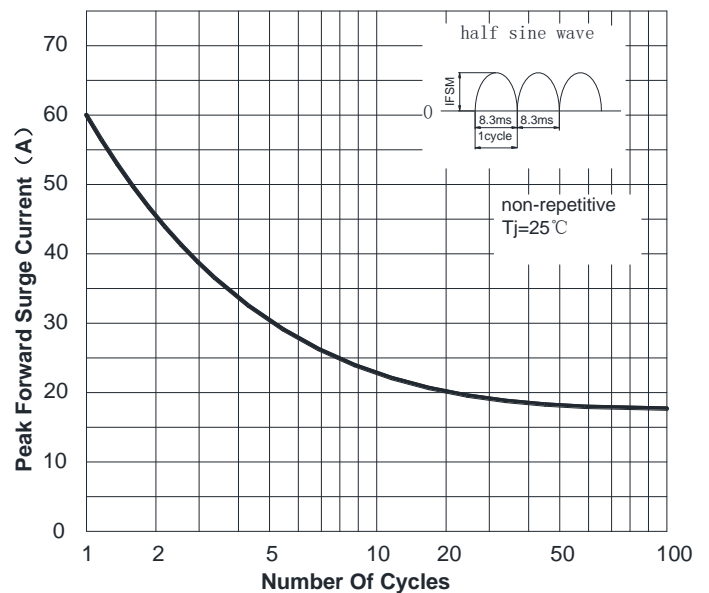


FIG3: Forward Voltage

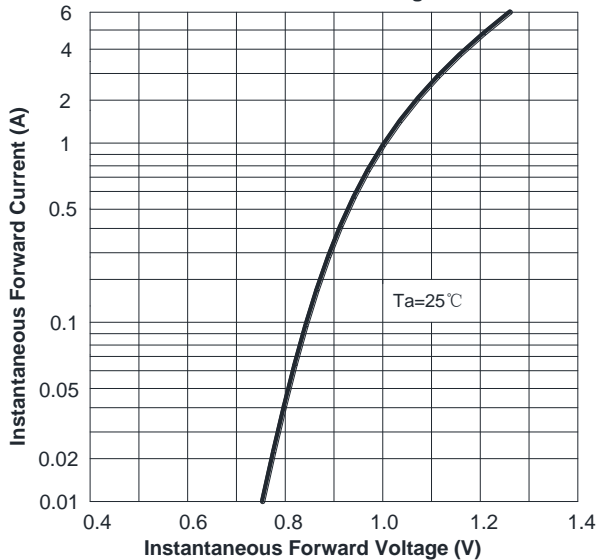
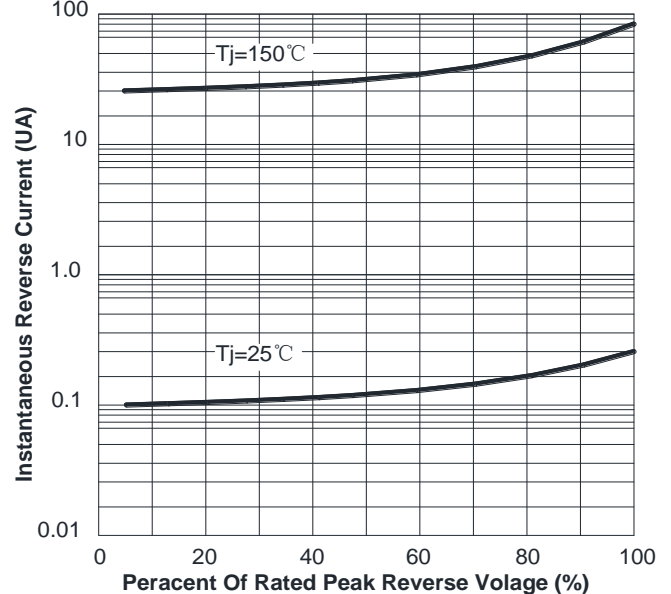
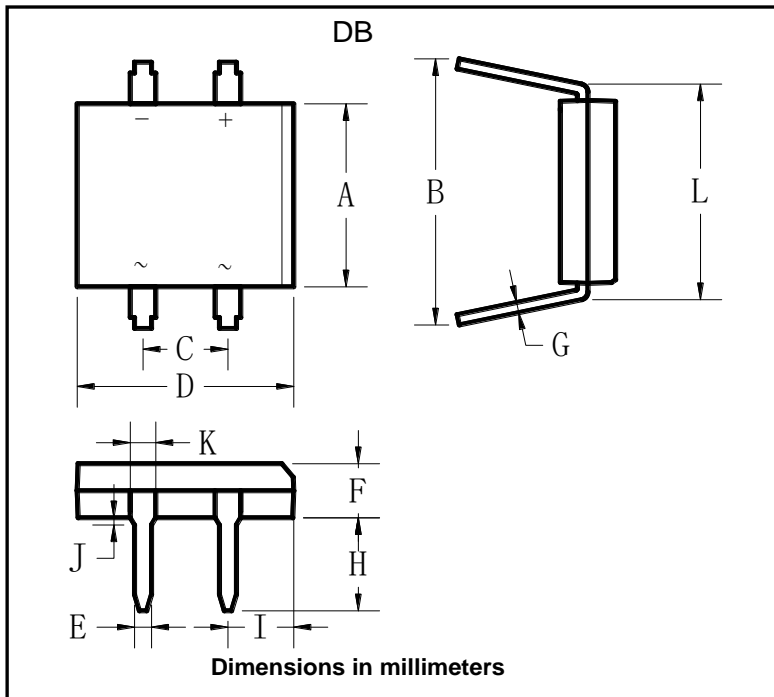


FIG4:Typical Reverse Characteristics



■ Outline Dimensions



DB		
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	2.80	3.30
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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