

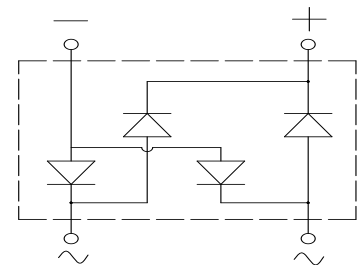
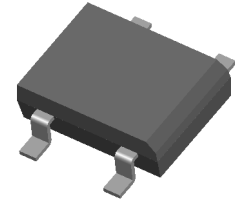
Bridge Rectifiers

Features

- UL recognition, file #E313149
- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

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:** DBLS
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	DBL151S	DBL152S	DBL153S	DBL154S	DBL155S	DBL156S	DBL157S
Device marking code				DBL151S	DBL152S	DBL153S	DBL154S	DBL155S	DBL156S	DBL157S
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	On glass-epoxy substrate	I _O	A	1.5						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T _j =25°C		I _{FSM}	A	60						
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode		I ² t	A ² s	15						
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	DBL151S	DBL152S	DBL153S	DBL154S	DBL155S	DBL156S	DBL157S
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 ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	DBL151S	DBL152S	DBL153S	DBL154S	DBL155S	DBL156S	DBL157S
Thermal Resistance	Between junction and ambient, On glass-epoxy substrate	R θ J-A	$^\circ\text{C/W}$	68.0						
	Between junction and lead	R θ J-L		15.0						

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DBL151S~DBL157S	B1	Approximate 0.32	50	5000	20000	TUBE
DBL151S~DBL157S	F1	Approximate 0.32	1500	3000	21000	REEL

■ Characteristics (Typical)

FIG1:Io-TaCurve

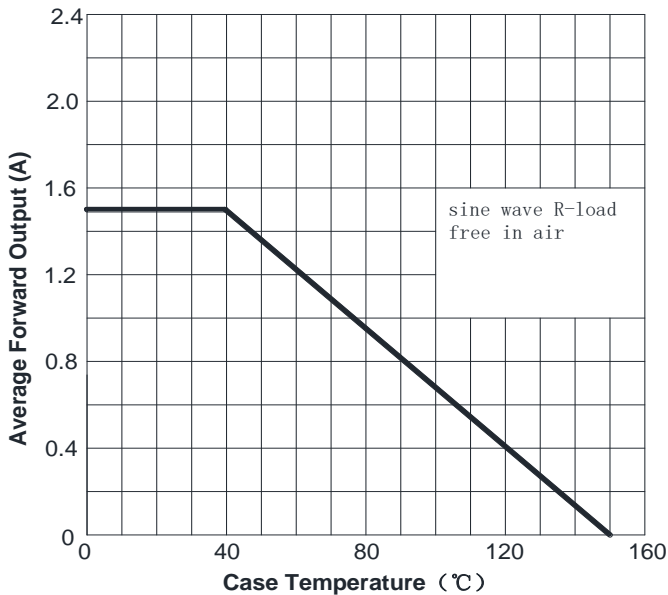


FIG2:Surge Forward Current Capability

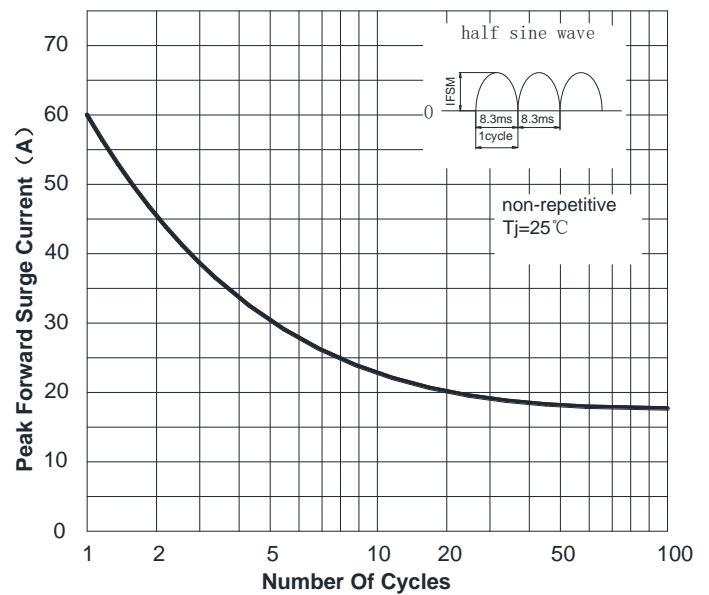


FIG3: Forward Voltage

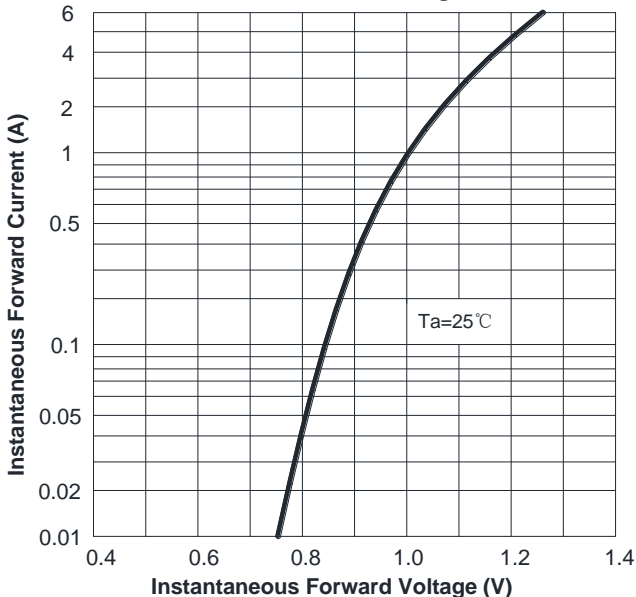
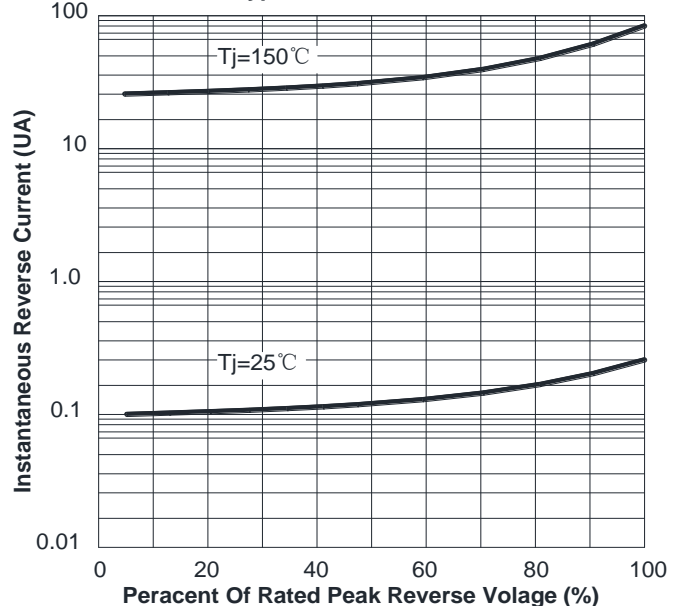
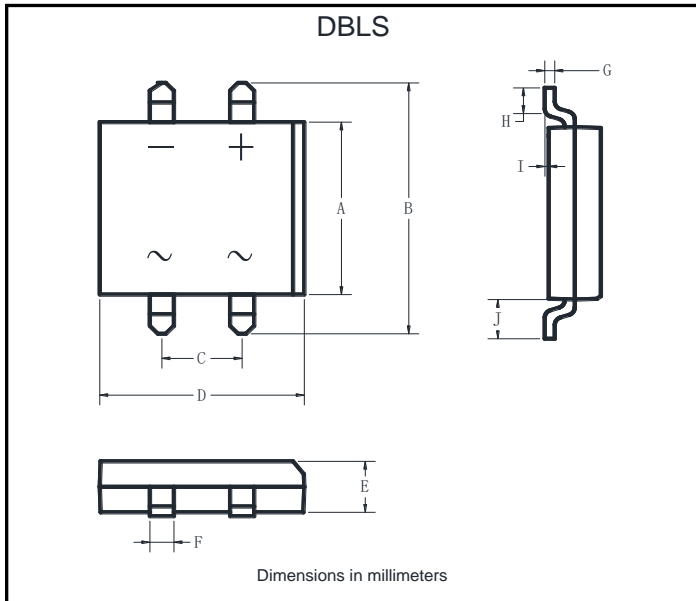


FIG4:Typical Reverse Characteristics

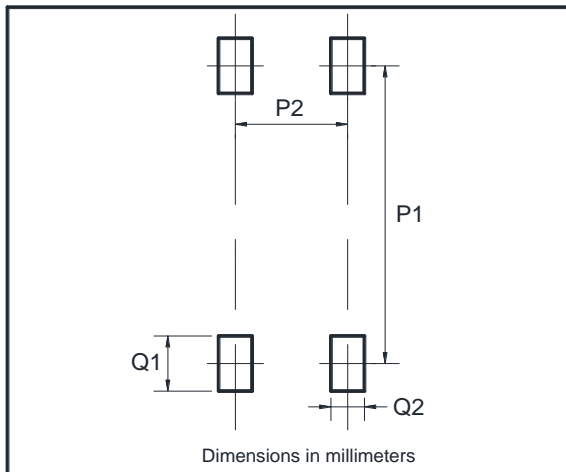


■ Outline Dimensions



DBLS		
Dim	Min	Max
A	6.20	6.50
B	9.60	10.30
C	5.00	5.20
D	8.13	8.51
E	2.35	2.45
F	1.02	1.2
G	0.22	0.33
H	1.02	1.53
I	0	0.30
J	1.80	2.10

■ Suggested pad layout



Dim	Min
P1	8.73
P2	5.12
Q1	2.22
Q2	1.2

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