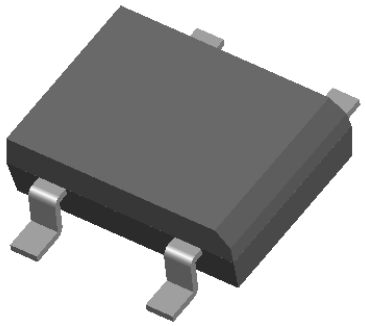
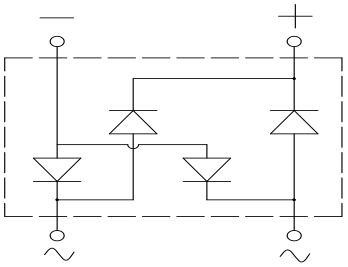
Bridge Rectifiers





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 (Ta=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	DBL101S	DBL102S	DBL103S	DBL104S	DBL105S	DBL106S	DBL107S
Device marking code				DBL101S	DBL102S	DBL103S	DBL104S	DBL105S	DBL106S	DBL107S
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℃	On glass-epoxi substrate	IO	A	1.0						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, Tj=25℃		IFSM	A	30						
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode		I^2t	A^2s	3.7						
Storage temperature		Tstg	℃	-55 ~+150						
Junction temperature		Tj	℃	-55 ~+150						

■Electrical Characteristics (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	DBL101S	DBL102S	DBL103S	DBL104S	DBL105S	DBL106S	DBL107S
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=0.5A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	μA	$V_{RM}=V_{RRM}$	5						

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	DBL101S	DBL102S	DBL103S	DBL104S	DBL105S	DBL106S	DBL107S
Thermal Resistance	Between junction and ambient, On glass-epoxi substrate	RθJ-A	℃/W	68.0						
	Between junction and lead	RθJ-L		15.0						

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DBL101S~DBL107S	B1	Approximate 0.32	50	5000	20000	TUBE
DBL101S~DBL107S	F1	Approximate 0.32	1500	3000	21000	REEL

■ Characteristics (Typical)

FIG1:Io-Ta Curve

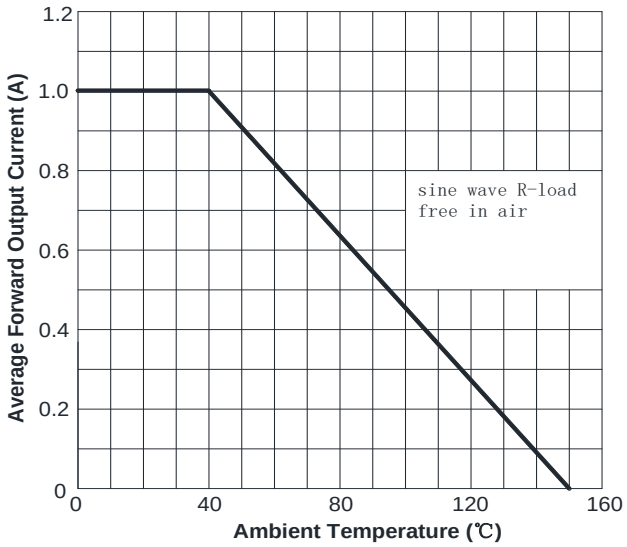


FIG2:Surge Forward Current Capability

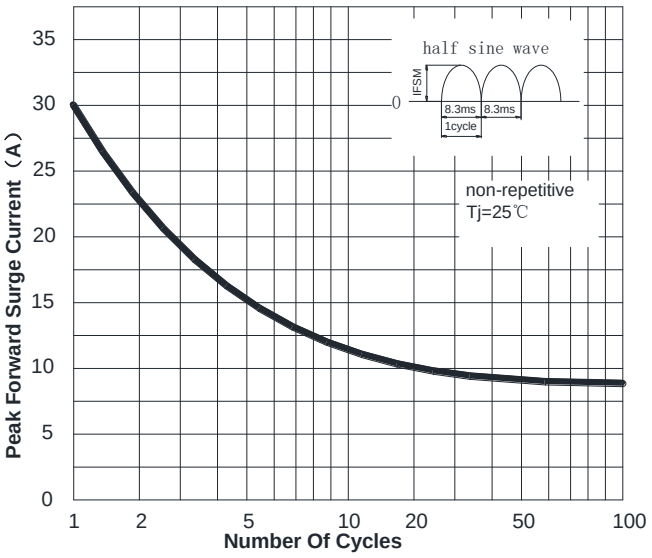


FIG3: Forward Voltage

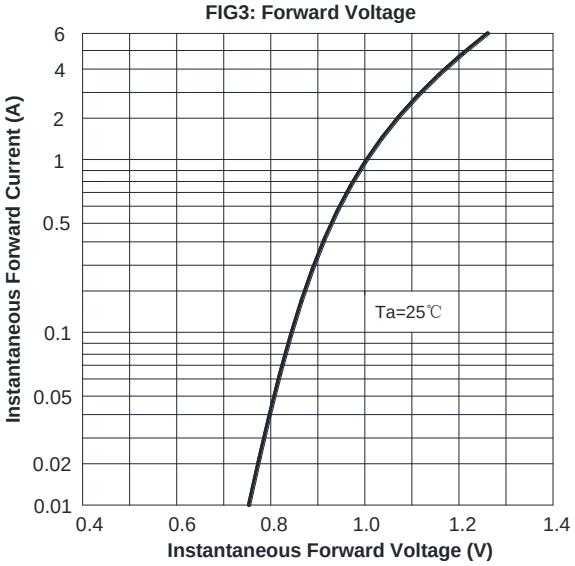
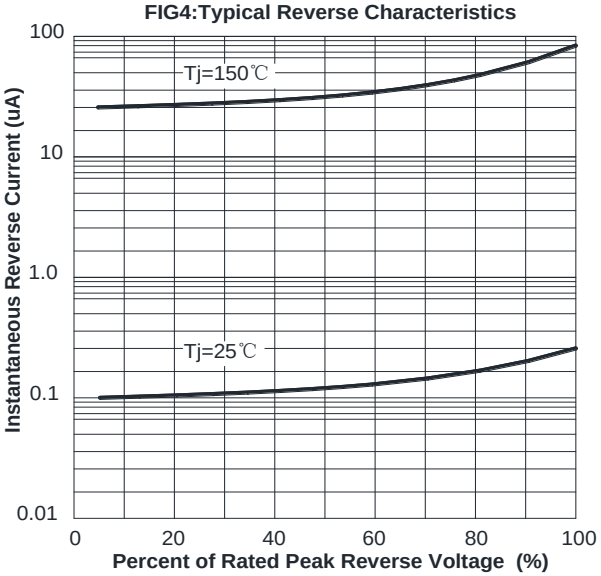
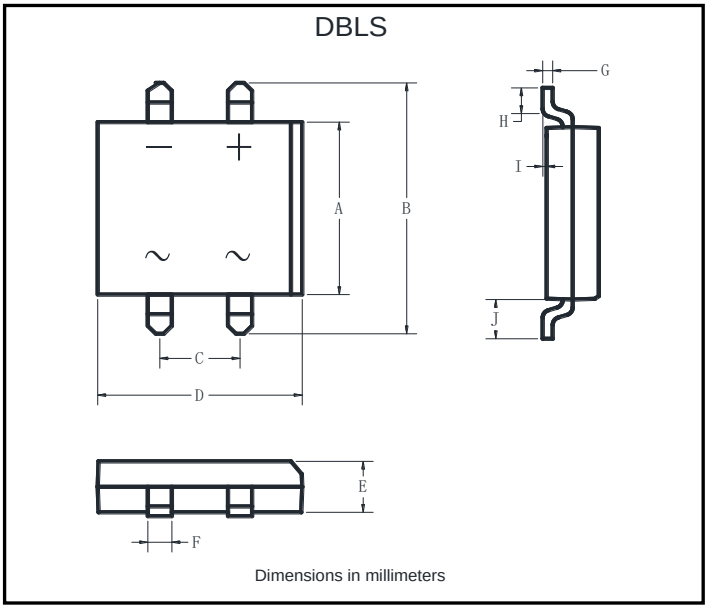


FIG4:Typical Reverse Characteristics

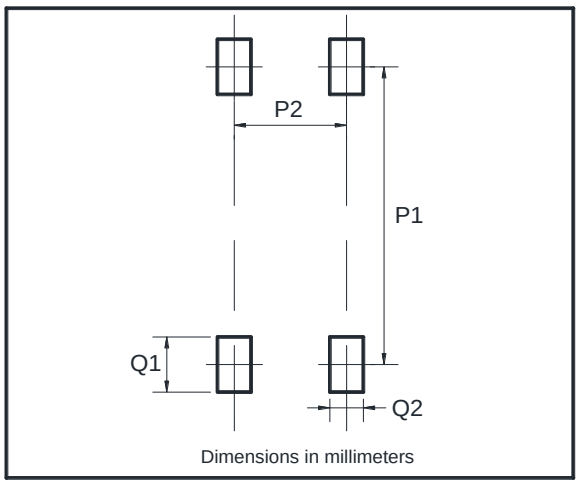


■ Outline Dimensions



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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