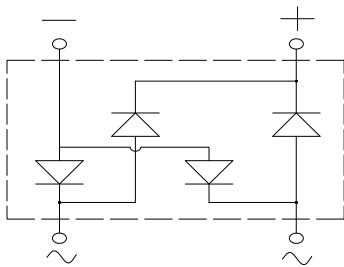
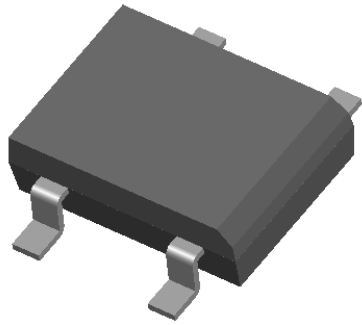


Bridge Rectifiers



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:** DBS
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 ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S
Device marking code			DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S
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						
On glass-epoxy substrate									
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, $T_j=25^\circ\text{C}$	I_{FSM}	A	30						
Current squared time @1ms $\leq t \leq$ 8.3ms $T_j=25^\circ\text{C}$, Rating of per diode	I^2t	A^2s	3.7						
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	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=0.5\text{A}$	1.05						
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM}	μA	$V_{RM}=V_{RRM}$	5						



DB101S THRU DB107S

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

PARAMETER		SYMBOL	UNIT	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S
Thermal Resistance	Between junction and ambient, On glass-epoxy substrate	R _{θJ-A}	°C/W	68						
	Between junction and lead	R _{θJ-L}		15						

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DB101~DB107S	B1	Approximate 0.34	50	5000	20000	TUBE
DB101~DB107S	F1	Approximate 0.34	1500	3000	21000	REEL

■ Characteristics(Typical)

FIG1: I_o-T_a Curve

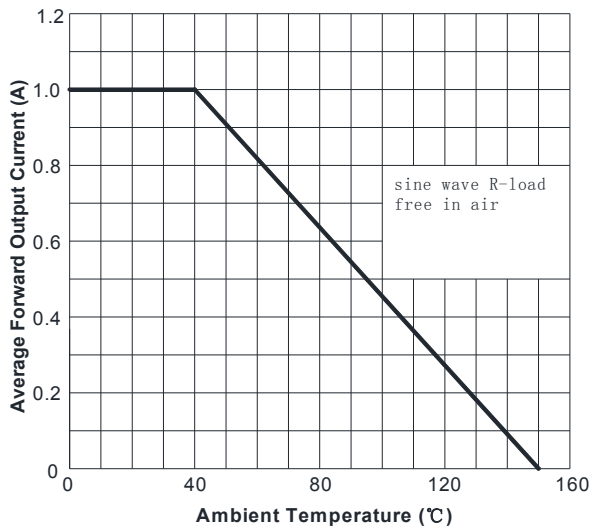


FIG2: Surge Forward Current Capability

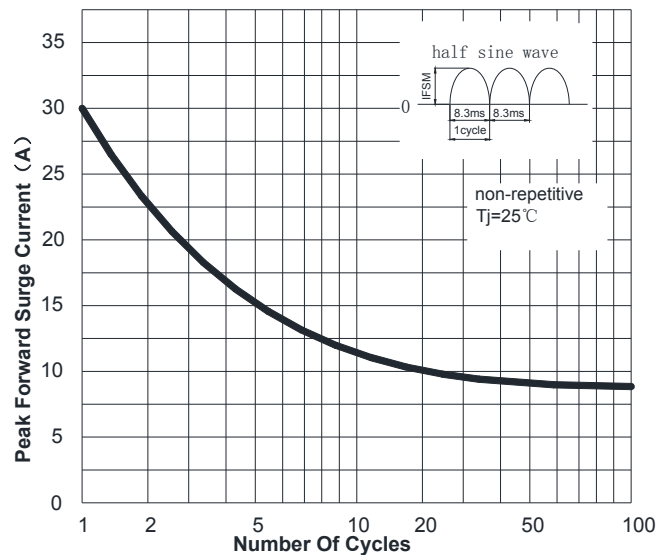


FIG3: Forward Voltage

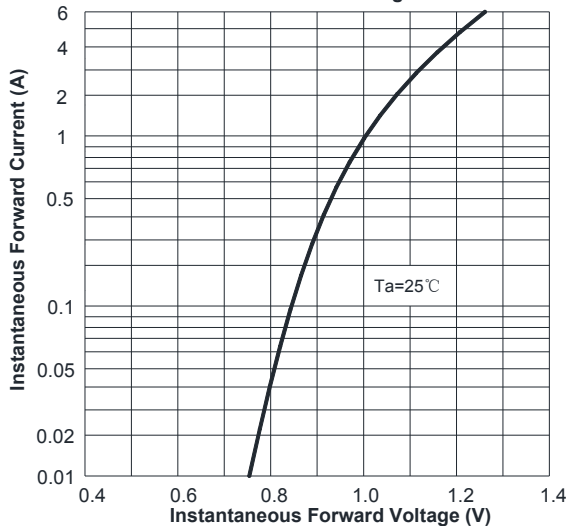
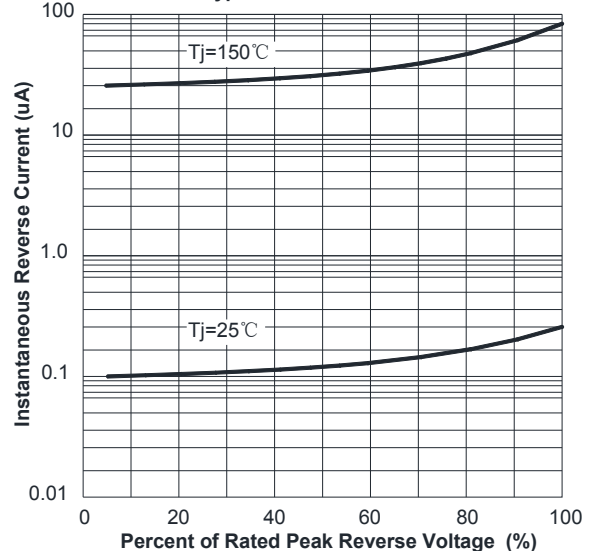


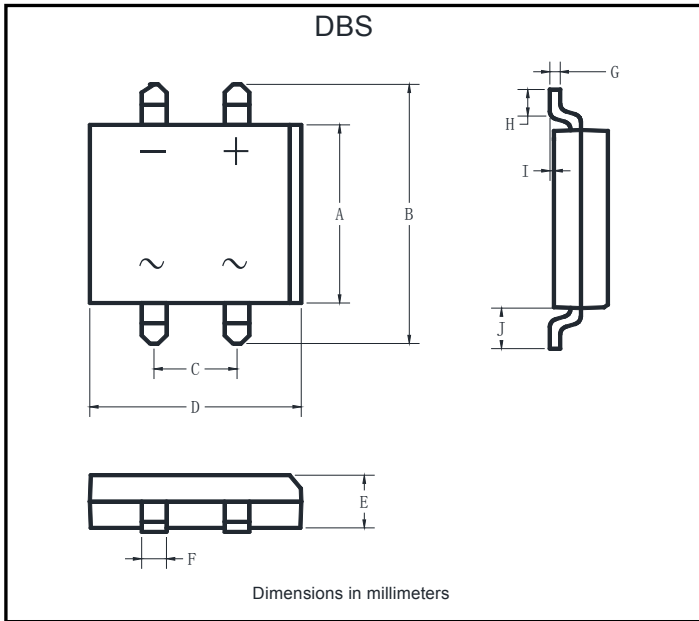
FIG4: Typical Reverse Characteristics





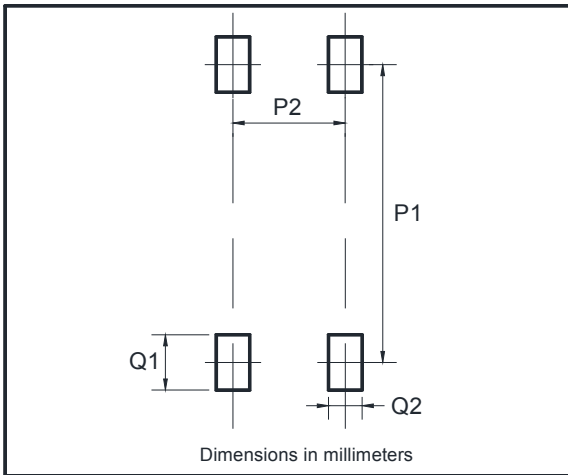
DB101S THRU DB107S

■ Outline Dimensions



DBS		
Dim	Min	Max
A	6.20	6.50
B	9.60	10.30
C	5.00	5.20
D	8.13	8.51
E	2.80	3.30
F	1.02	1.2
G	0.22	0.33
H	1.02	1.53
I	0.076	0.33
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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