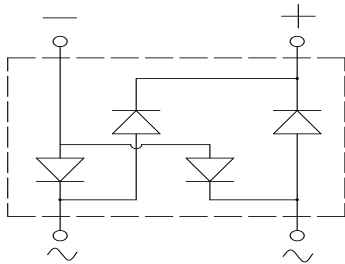
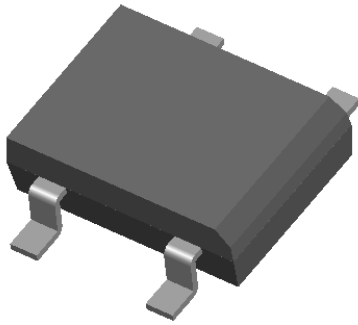


## Bridge Rectifiers



### 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<sub>a</sub>=25°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 <sub>RRM</sub>	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, T <sub>a</sub> =40°C	I <sub>O</sub>	A	1.0						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T <sub>j</sub> =25°C	I <sub>FSM</sub>	A	30						
Current squared time @ 1ms≤t≤8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> s	3.7						
Storage temperature	T <sub>stg</sub>	°C	-55 ~+150						
Junction temperature	T <sub>j</sub>	°C	-55 ~+150						

### ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>F</sub> M=0.5A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	V <sub>RM</sub> =V <sub>RRM</sub>	5						



# DB101S THRU DB107S

## ■ Thermal Characteristics (T<sub>a</sub>=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 $\theta$ J-A	°C/W	68.0						
	Between junction and lead	R $\theta$ 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
DB101-DB107S	B1	Approximate 0.34	50	5000	20000	TUBE
DB101-DB107S	F1	Approximate 0.34	1500	3000	21000	REEL

## ■ Characteristics(Typical)

FIG1: I<sub>o</sub>-T<sub>a</sub> Curve

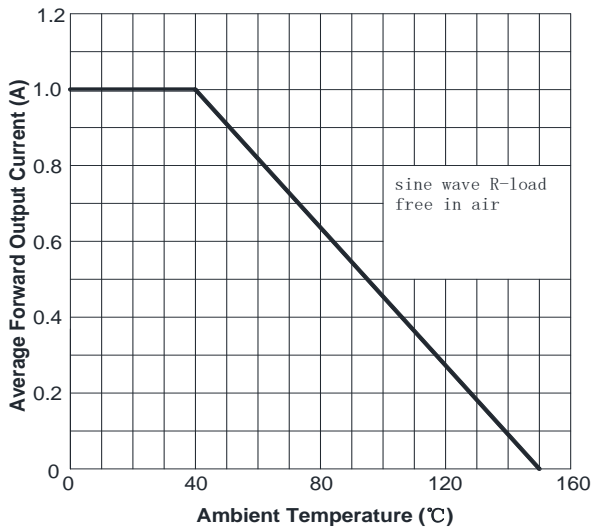


FIG2: Surge Forward Current Capability

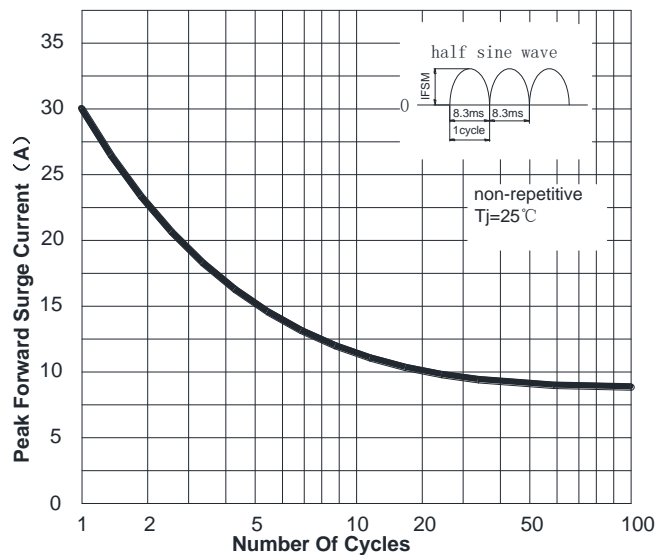


FIG3: Forward Voltage

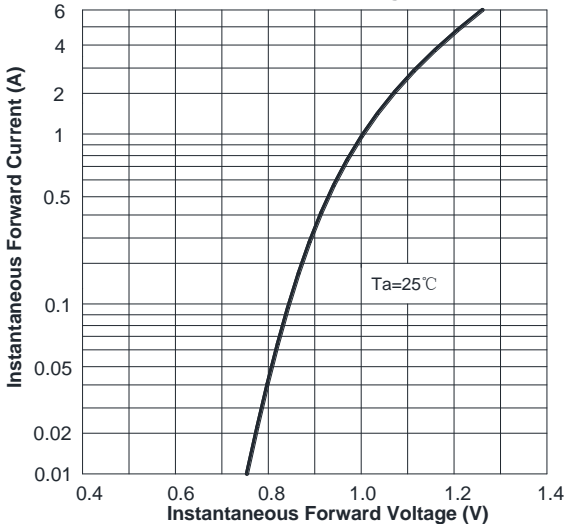
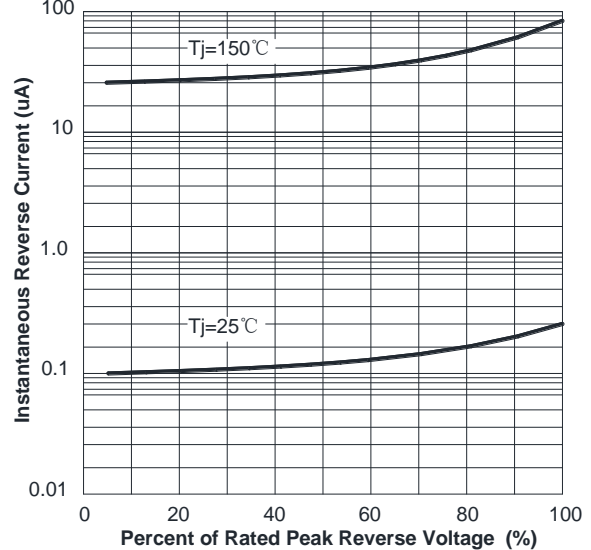


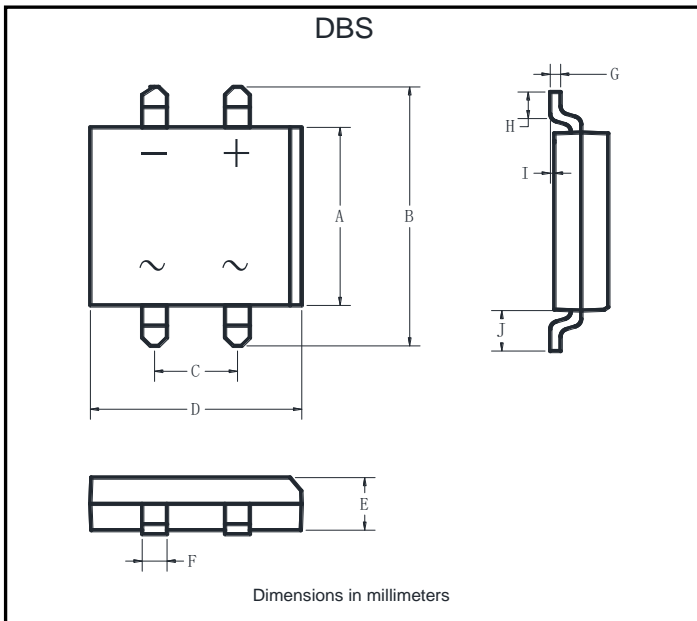
FIG4: Typical Reverse Characteristics





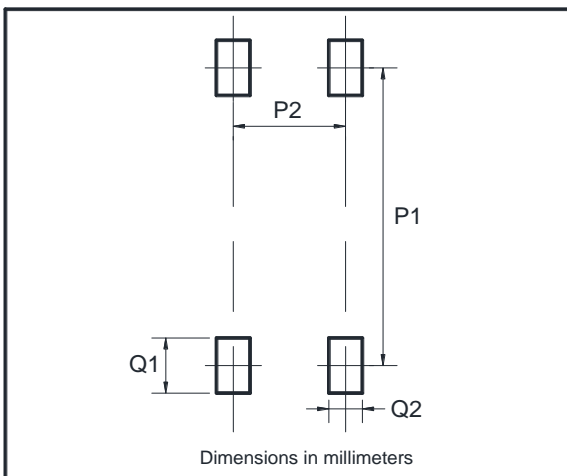
# DB101S THRU DB107S

## ■ 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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