

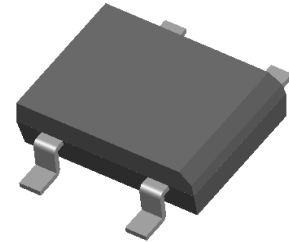
## Bridge Rectifiers

### 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

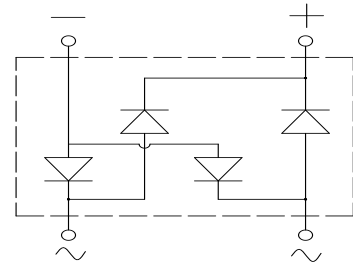
### Typical Applications

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	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	
Device marking code			DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	
Repetitive peak reverse voltage	$V_{RRM}$	V	50	100	200	400	600	800	1000	
Average rectified output current @60Hz sine wave, R-load, $T_a=40^\circ\text{C}$	IO	A	2.0							
Surge (non-repetitive) forward current @60Hz half sine wave, 1 cycle, $T_j=25^\circ\text{C}$	$I_{FSM}$	A	60							
Current squared time @ $1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$ , Rating of per diode	$I^2t$	$\text{A}^2\text{s}$	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	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	
Maximum instantaneous forward voltage drop per diode	$V_F$	V	$I_{FM}=1.0\text{A}$	1.00							
Maximum DC reverse current at rated DC blocking voltage per diode	$I_{RRM}$	$\mu\text{A}$	$V_{RM}=V_{RRM}$	5							

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

PARAMETER		SYMBOL	UNIT	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S
Thermal Resistance	Between junction and ambient, On glass-epoxy substrate	R $\theta$ J-A	$^\circ\text{C/W}$	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
DB201S~DB207S	B1	Approximate 0.34	50	5000	20000	TUBE
DB201S~DB207S	F1	Approximate 0.34	1500	3000	21000	REEL

■ **Characteristics(Typical)**

FIG1:Io-Ta Curve

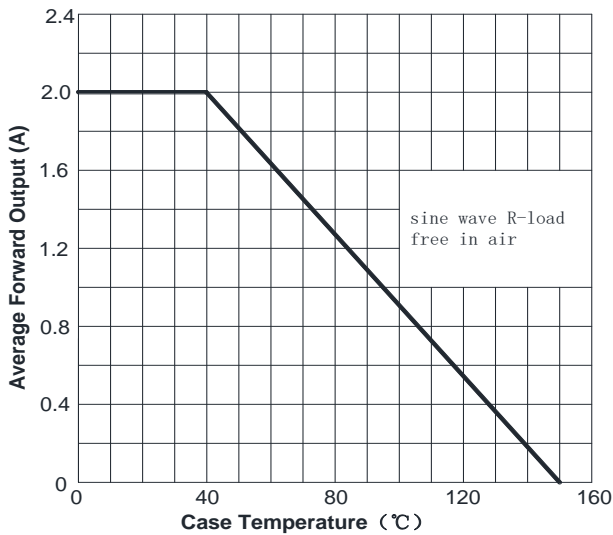


FIG2:Surge Forward Current Capability

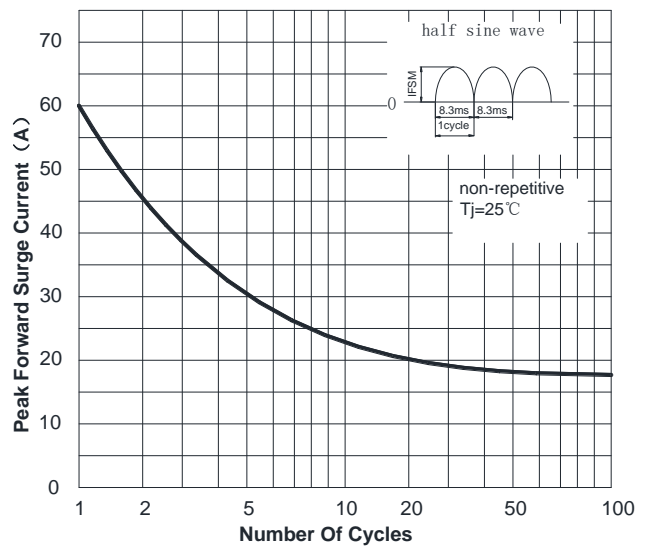


FIG3: Forward Voltage

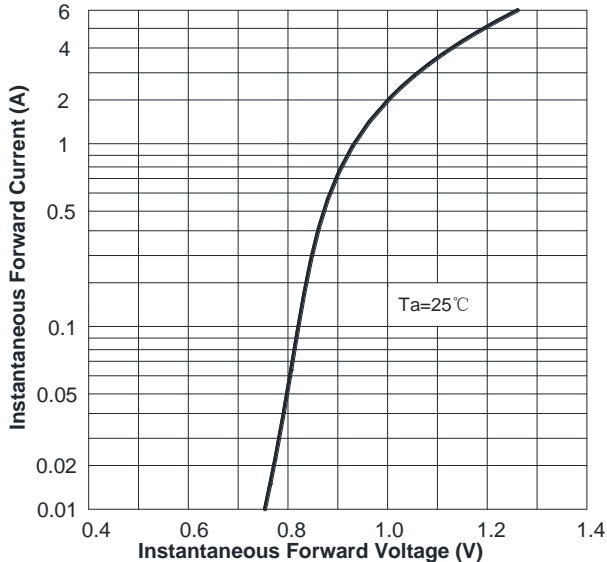
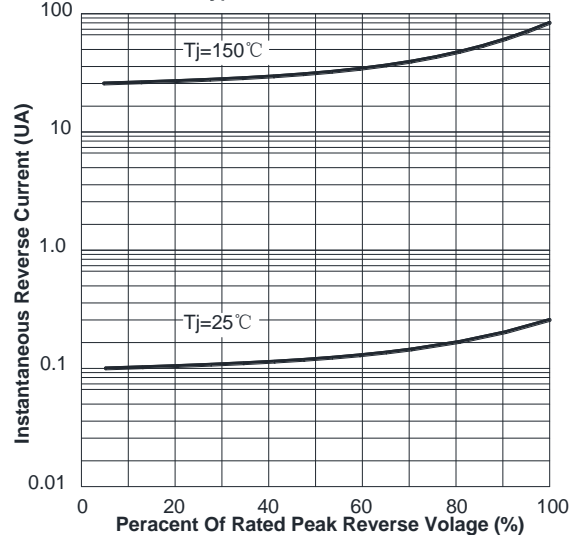
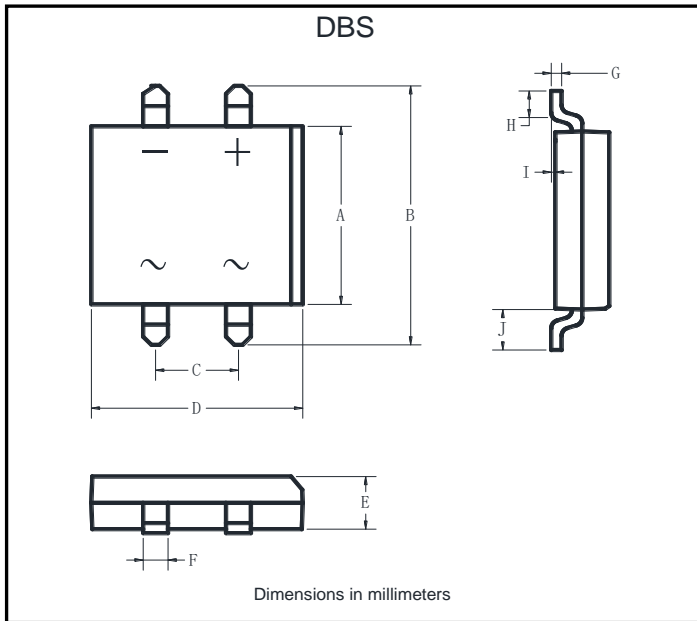


FIG4:Typical Reverse Characteristics

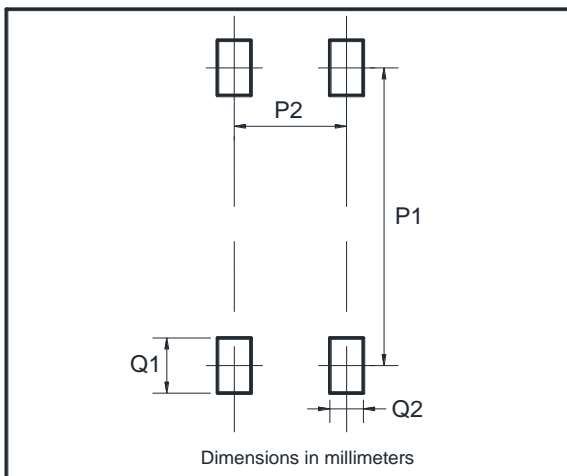


■ Outline Dimensions



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



m	Min
	8.73
?	5.12
	2.22
?	1.2

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