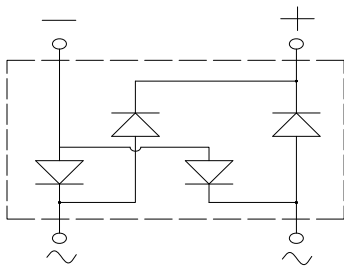
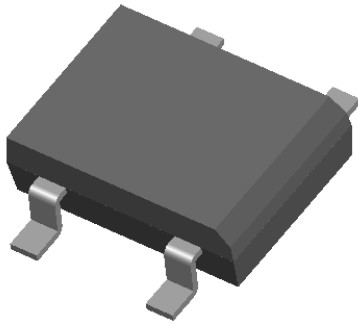


Bridge Rectifiers



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	DB107GS
Device marking code				DB107GS
Repetitive peak reverse voltage		V_{RRM}	V	1000
Average rectified output current @60Hz sine wave, R-load, $T_a=40^\circ\text{C}$	On glass-epoxy substrate	I_O	A	1
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	DB107GS
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



DB107GS

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

PARAMETER		SYMBOL	UNIT	DB107GS
Thermal Resistance	Between junction and ambient, On glass-epoxi substrate	$R_{\theta J-A}$	$^\circ\text{C/W}$	68
	Between junction and lead	$R_{\theta J-L}$		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
DB107GS	B1	Approximate 0.34	50	5000	20000	TUBE
DB107GS	F1	Approximate 0.34	1500	3000	21000	REEL

■ Characteristics (Typical)

FIG1: I_o - T_a Curve

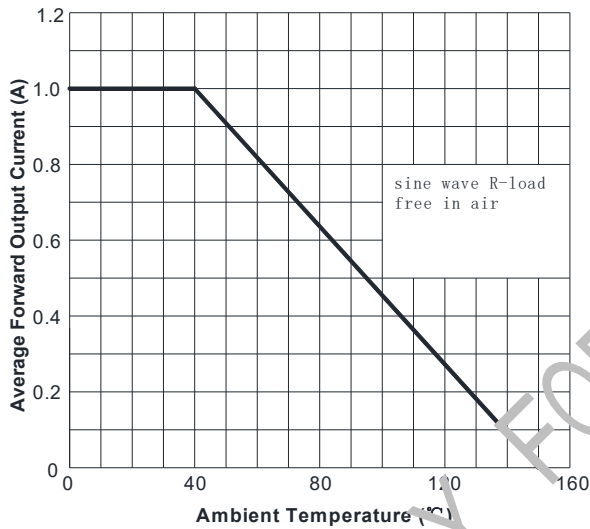


FIG2: Surge Forward Current Capability

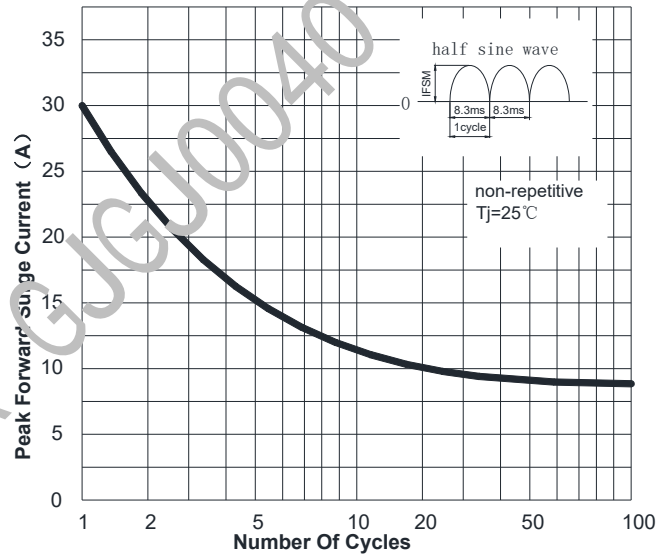


FIG3: Forward Voltage

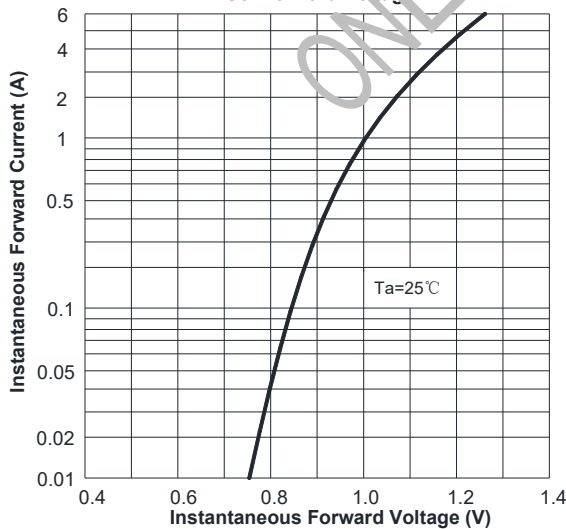
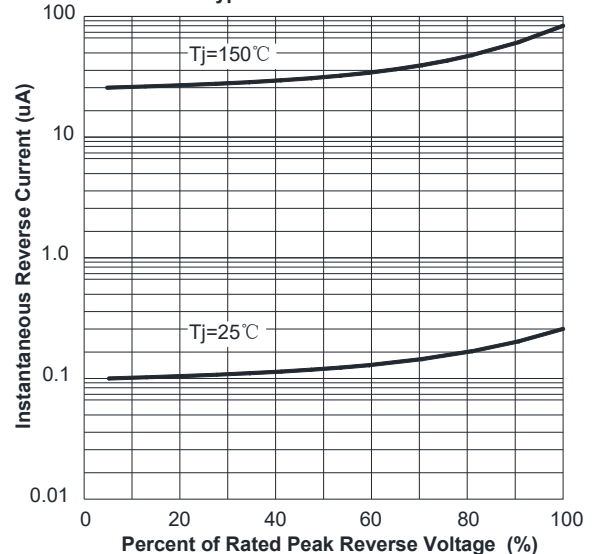


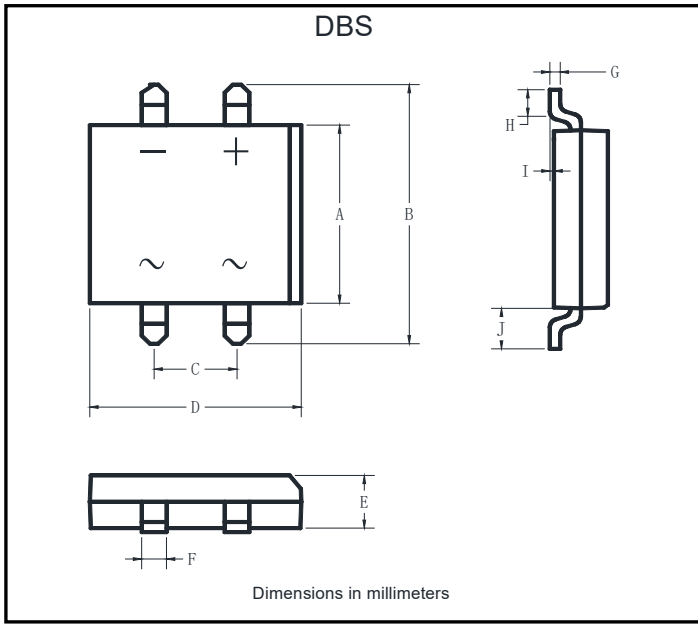
FIG4: Typical Reverse Characteristics





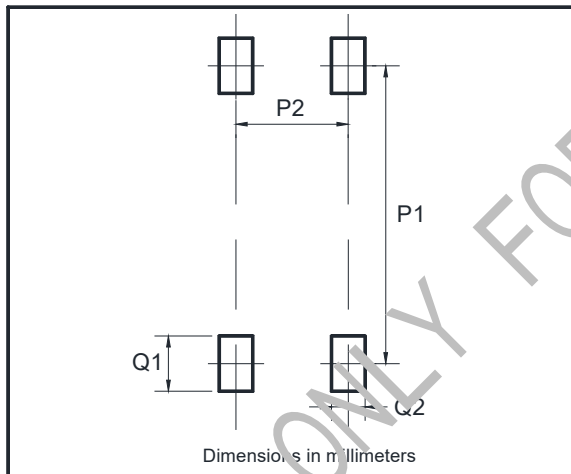
DB107GS

■ 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



DB107GS

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.

ONLY FOR GJGJ0040