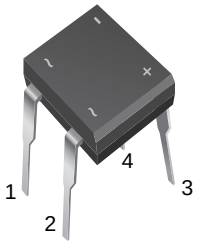
领晨科技
LEADING-TECH

DB101 THRU DB107

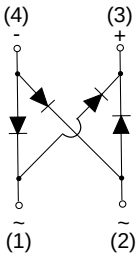
Single Phase Glass Passivated Bridge Rectifiers

Features



- Glass passivated junction
- The plastic material used carries Underwriters
- Laboratory flammability recognition 94V-0
- Suge overload ratings to 50 amperes peak
- Ideal for printed circuit board application
- Lead free in comply with EU RoHS 2011/65/EU directives

Mechanical Data



- Case: DB
- Terminals: Platde leads solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols molded or Marked on body
- Approx. Weight: 0.32g
- Mounting position: Any

Ordering Information

Part Number	Shipping	Packing Type
DB101 THRU DB107	2500PCS/Box	Box

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified,Resistive or inductive load,60HZ.
For Capacitive load derate current by 20%

Parameter	Symbol	DB101	DB102	DB103	DB104	DB105	DB106	DB107	unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at T_A=40℃	$I_{F(AV)}$	1.0							A
Peak forward surge current 8.3ms single sine-wave super imposed on rated load (JEDEC Method)	I_{FSM}	45							A
Typical Junction capacitance Per Element(Note 1)	C_j	16							pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	63							℃/w
Operating j temperature range	T_J	-55 to +150							℃
Storage temperature range	T_{STG}	-55 to +150							℃
Maximum instantaneous forward voltage drop per leg at 1.0A	V_F	1.1							V
Maximum DC reverse current at ratde T_A=25℃ DC blocking voltage per element T_A=125℃	I_R	5 500							μA

Notes: (1)Measured at 1.0MHz and applied reverse voltage of 4.0 V DC.
(2)Thermal resistance from junction to ambient mounted on P.C.B with 0.5*0.5(13*13mm)copper pads.

Characteristics Curves

FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

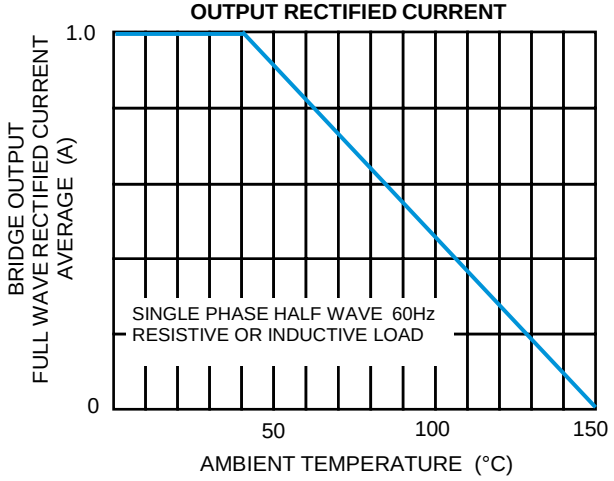


FIG.2 MAXIMUM NON-REPETITIVE SUNRGE CURRENT

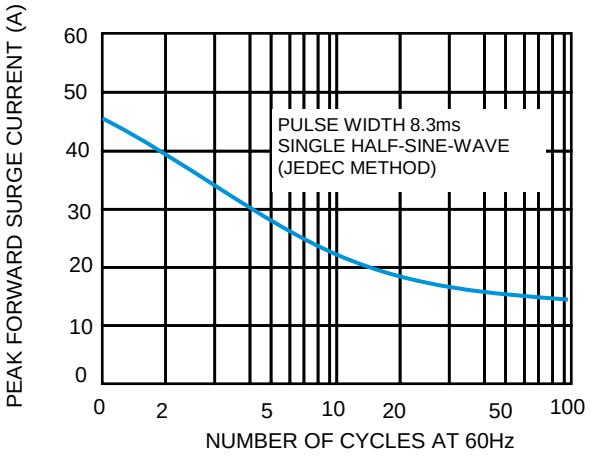


FIG.3 TYPICAL JUNCTION CAPACITANCE

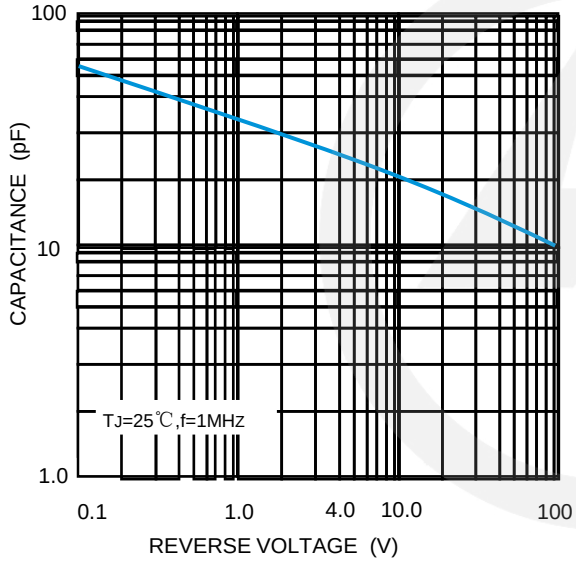


FIG.4 TYPICAL FORWARD CHARACTERISTICS

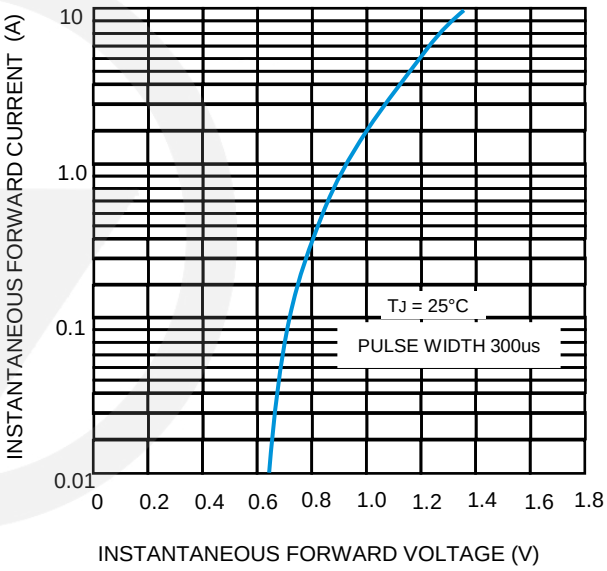
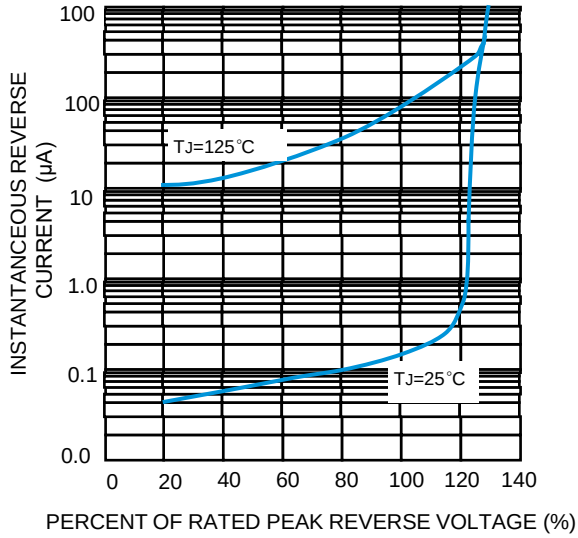
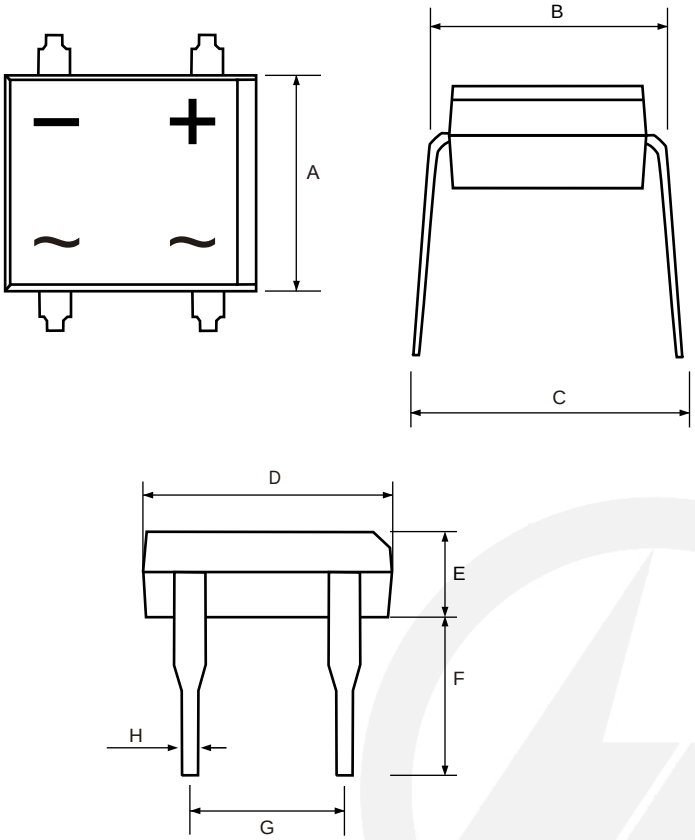


FIG.5 TYPICAL REVERSE CHARACTERISTICS



DB Package Outline



Unit: mm

SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	6.20	6.50
B	7.20	8.00
C	7.60	8.90
D	7.80	8.80
E	2.20	3.00
F	3.90	4.90
G	5.00	5.20
H	0.45	0.55

Marking

Type number	Marking code
DB101	DB101
DB102	DB102
DB103	DB103
DB104	DB104
DB105	DB105
DB106	DB106
DB107	DB107

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Version Update Information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision Content	Revision Reason	Revision Person	Note
01	2025.08.03	2025.08.03	3.0	New file	/	Ding	