

## 1.0A Single-Phase GLass Passivated Bridge Rectifiers

Recifier Reverse Voltage 50V to 1000V



**DBS**

### Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Surge overload ratings to 50 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs(2.3kg)tension

### Mechanical Data

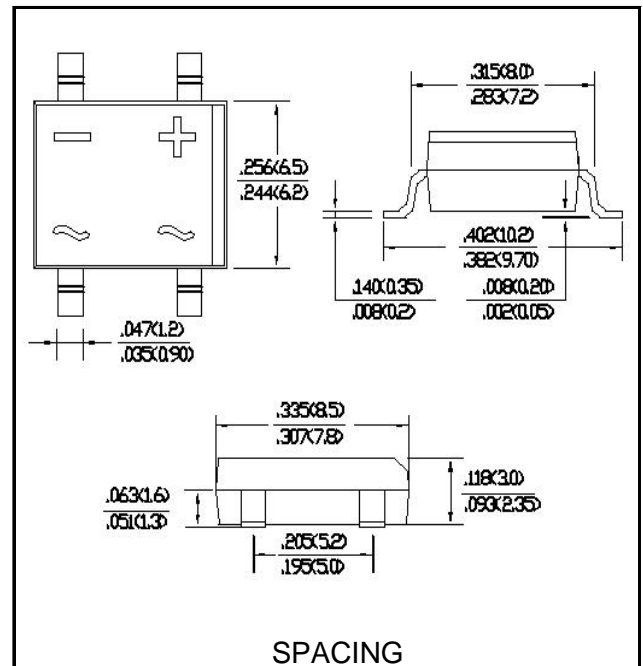
Case:Molded plastic

Terminals:Platde leads solderable per MIL-STD-750, Method 2026

Polarity:Polarity symbols molded or Marked on body

Mounting Position:Any

Weight:0.011ounce,0.30 grams(approx)



### Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or inductive load, 60HZ.

For Capacitive load derate current by 20%

Parameter	Symbol	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=40°C	IF(AV)	1.0							A
Peak forward surge current 8.3ms single sine-wave super imposed on rated load (JEDEC Method)	IFSM	50							A
Rating for fusing(t<8.3ms)	I <sup>2</sup> t	10							A <sup>2</sup> sec
Typical Junction capacitance Per Element(Note 1)	Cj	16							pF
Typical thermal resistance (Note 2)	RθJA	63							°C/w
Operating j temperature range	TJ	-55to+150							°C
Storage temperature range	TSTG	-55to+150							°C

### Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or inductive load, 60HZ.

For Capacitive load derate current by 20%

Parameter	Symbol	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	unit
Maximum instantaneous forward voltage drop per leg at 1.0A	VF	1.1							V
Maximum DC reverse current at ratde TA=25°C	IR	10							μA
DC blocking voltage per element TA=125°C		500							

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

## Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

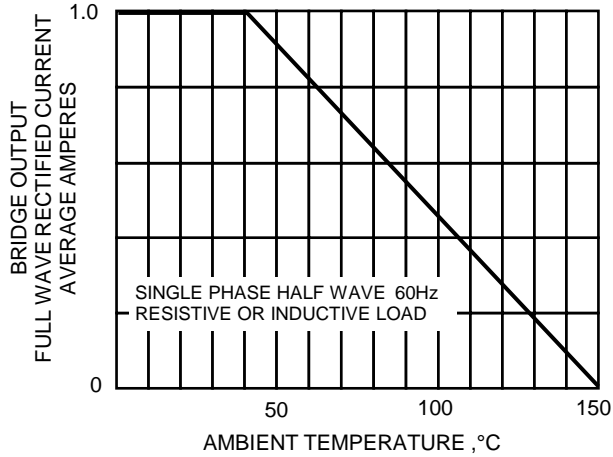


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

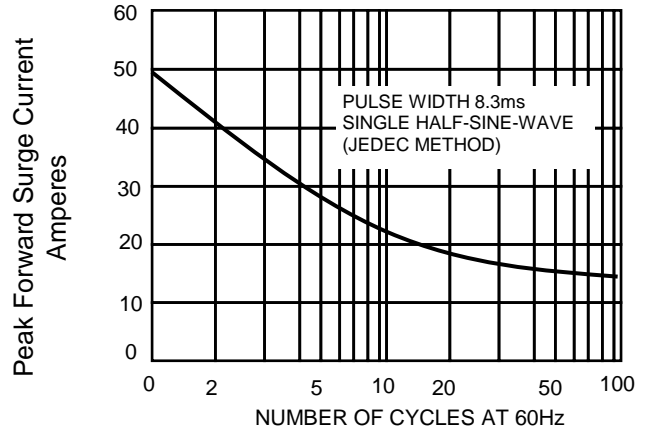


FIG.3-TYPICAL JUNCTION CAPACITANCE

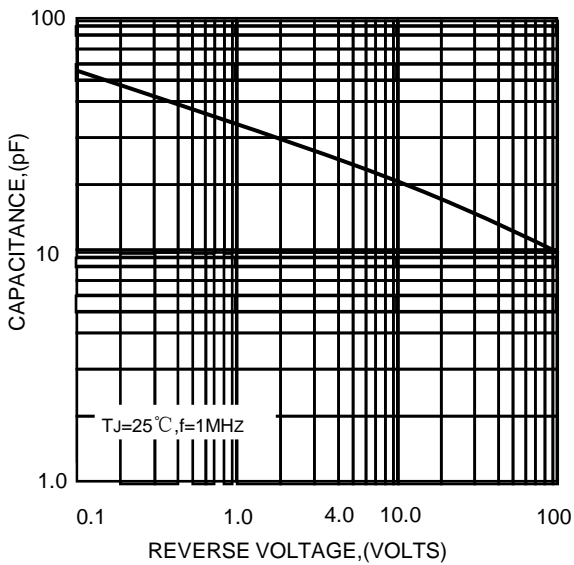


FIG.4-TYPICAL FORWARD CHARACTERISTICS

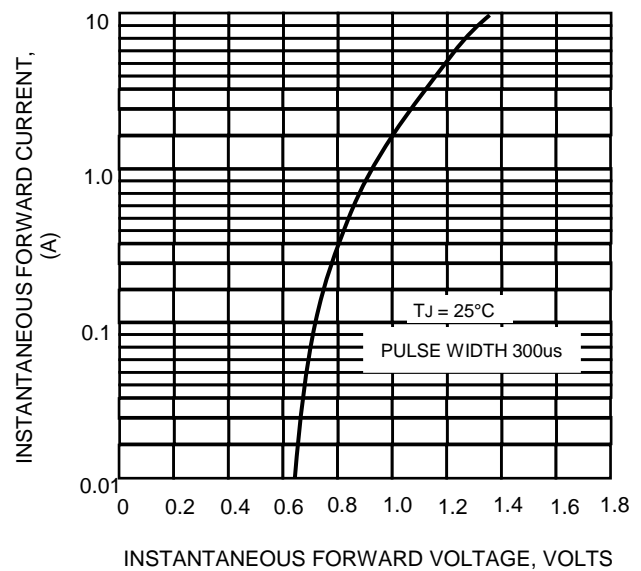
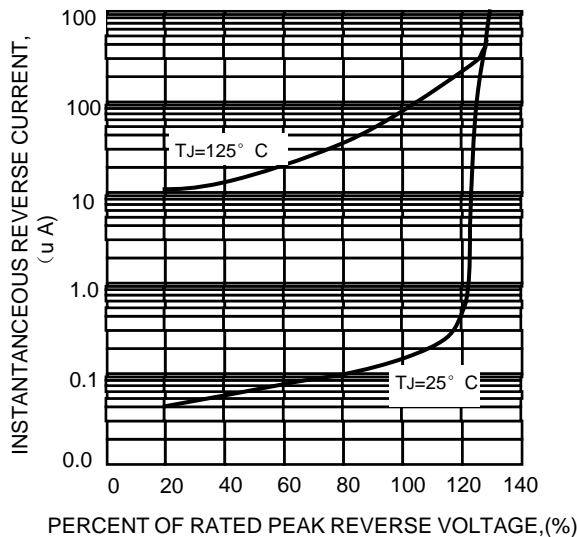
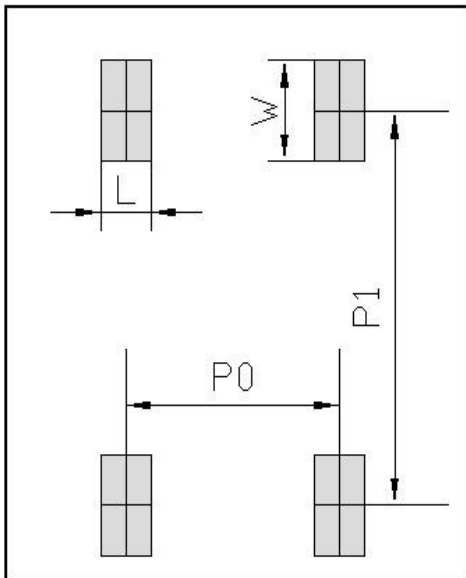


FIG.5-TYPICAL REVERSE CHARACTERISTICS



**Ordering Information(Example)**

PREFFREN P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DB101S~DB107S	Approximate 0.30	50	5000	20000	TUBE
DB101S~DB107S	Approximate 0.30	1500	3000	21000	REEL

**Suggested pad layout**


Dimensions in millimeters

Unit:mm	
DIM	MIN
P0	5.12
P1	8.73
L	1.2
W	2.22