

## 3.0A Single-Phase GLass Passivated Bridge Rectifiers

Recifier Reverse Voltage 50V to 1000V



### DBM

### Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Suge overload ratings to 85 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs(2.3kg)tension

### Mechanical Data

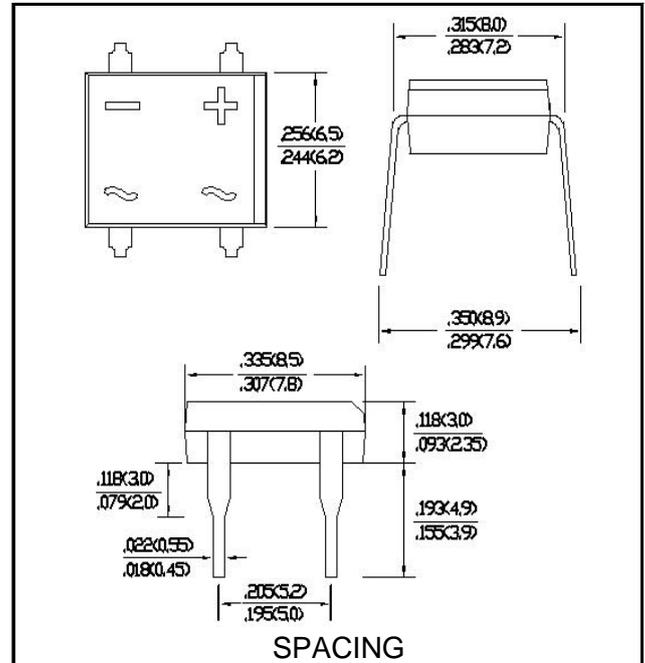
Case:Molded plastic

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

Polarity:Polarity symbols molded or Marked on body

Mounting Position:Any

Weight:0.011ounce,0.32 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	DB301	DB302	DB303	DB304	DB305	DB306	DB307	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)	3.0							A
Peak forward surge current 8.3ms single sine-wave super imposed on rated load (JEDEC Method)	IFSM	85							A
Rating for fusing(t<8.3ms)	I <sup>2</sup> t	30							A <sup>2</sup> sec
Typical Junction capacitance Per Element(Note 1)	Cj	35							pF
Typical thermal resistance (Note 2)	RθJA	68							°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	DB301	DB302	DB303	DB304	DB305	DB306	DB307	unit
Maximum instantaneous forward voltage drop per leg at 3.0A	VF	1.1							V
Maximum DC reverse current at ratde TA=25°C	IR	5							μA
DC blocking voltage per element TA=125°C		100							

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

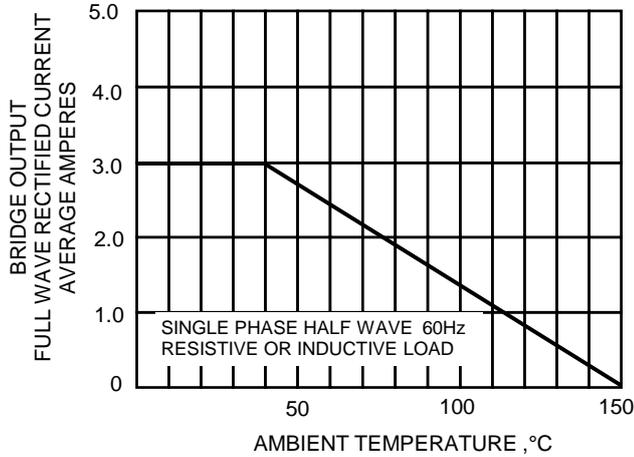


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

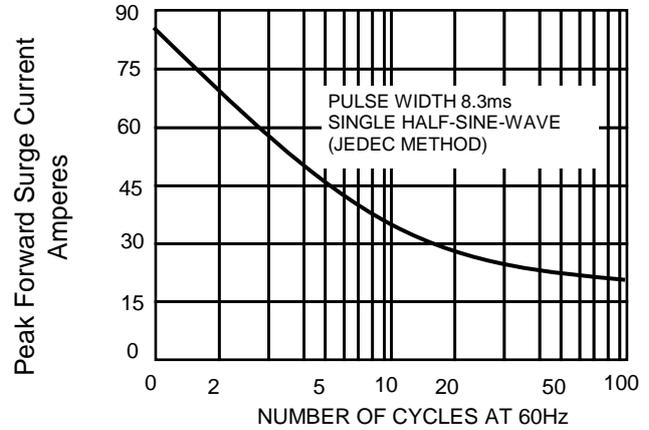


FIG.3-TYPICAL JUNCTION CAPACITANCE

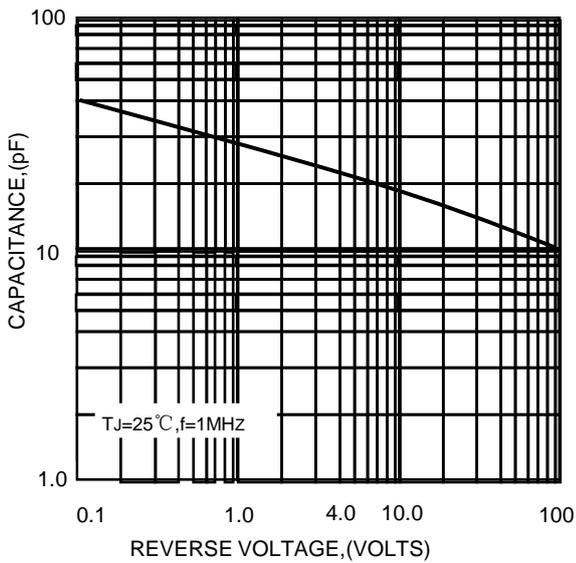


FIG.4-TYPICAL FORWARD CHARACTERISTICS

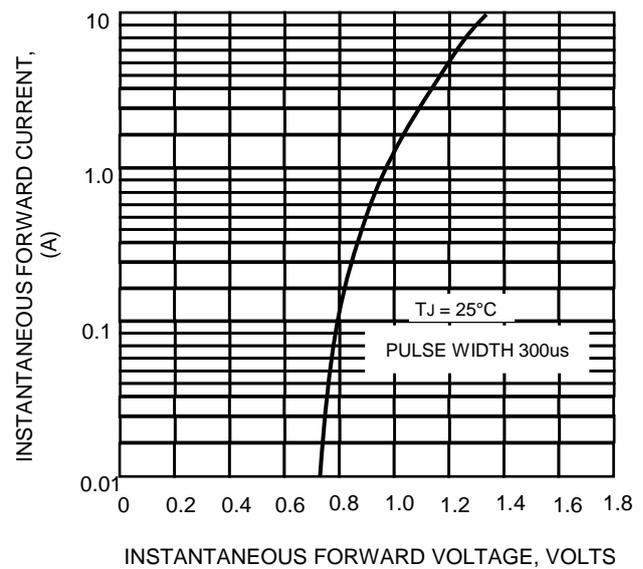
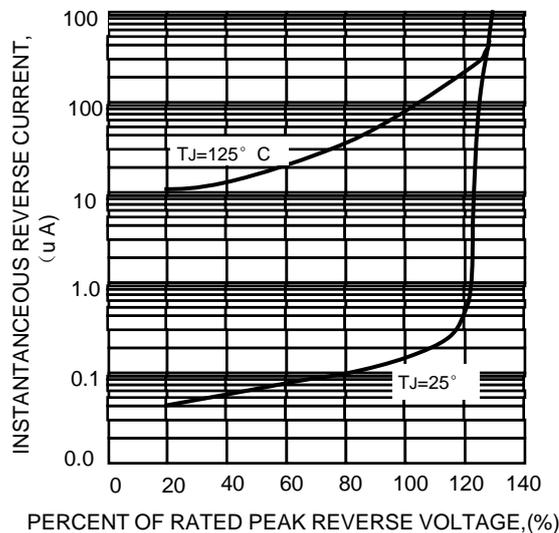


FIG.5-TYPICAL REVERSE CHARACTERISTICS



**Ordering Information(Example)**

<b>PREFREN P/N</b>	<b>UNIT WEIGHT(g)</b>	<b>MINIMUM PACKAGE(pcs)</b>	<b>INNER BOX QUANTITY(pcs)</b>	<b>OUTER CARTON QUANTITY(pcs)</b>	<b>DELIVERY MODE</b>
DB301~DB307	Approximate 0.32	50	2500	10000	TUBE