

# 3.0A Single-Phase GLass Passivated Bridge Rectifiers

Recifiter Reverse Voltage 50V to 1000V



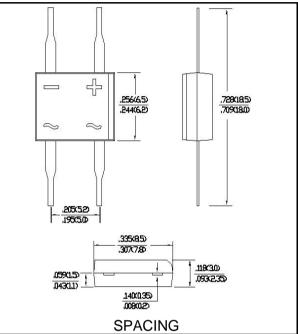
<u>DB平脚</u>

#### **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
- 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  $^{\circ}$ 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	IF(AV)	3.0							А
output current at TA=40℃	IF(AV)								
Peak forward surge current single sine-wave	IFSM	85							А
superimposed on rated load (JEDEC Method)	IFSIVI	65							
Rating for fusing(t<8.3ms)	l <sup>2</sup> t	10						A <sup>2</sup> sec	
Typical thermal resistance per element(1)	ReJA	110							°C/w
Typical thermal resistance per element(2)	Cj	25.0							PF
Operating junction and stroage temperature	TJ,		55to : 150						ŝ
range	TSTG	-55to+150						°C	

## **Electrical Characteristics**

Rating at 25  $^\circ\!\!\!C$  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	VF	1.1							V
drop per leg at 3.0A	VF								
Maximum DC reverse current at ratde TA=25 °C	IR	10 500							UA
DC blocking voltage per element TA=125°C									

Notes:(1)Thermal resistance from Junction to Ambemt on P.C.board mounting. (2)Measured at 1.0MHz and applied reverse voltage of 4.0 volts.



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

DERATING CURVE

FIG.1-TYPICAL FORWARD CURRENT

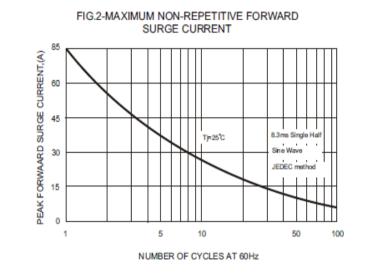


FIG.3-TYPICAL FORWARD CHARACTERISTICS 50 INSTANTANEOUS FORWARD CURRENT,(A) 10 3.0 1.0 j=25℃ Width 30 1% Duty Cycle 0.1 .01 0 .2 .6 .8 1.0 1.2 1.4 .4 FORWARD VOLTAGE,(V)

FIG.4-TYPICAL REVERSE CHARACTERISTICS 50 10 REVERSE LEAKAGE CURRENT, (uA) 3.0 1.0 0.1 TI=25°C .01 20 40 60 80 100 120 140 PERCENTAGE OF PEAK REVERSE VOLTAGE, (%)