

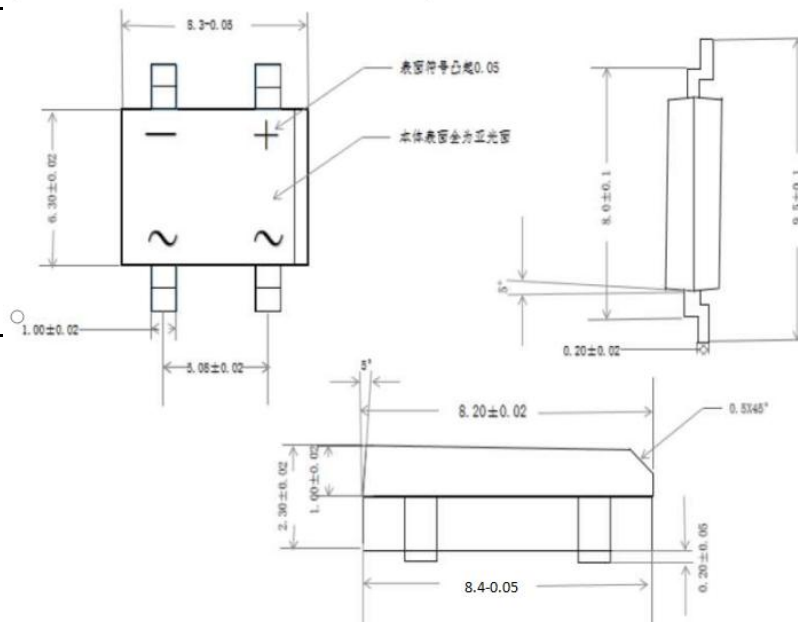


Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: DBS, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version,



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	DB301S	DB302S	DB303S	DB304S	DB305S	DB306S	DB307S	UNITS
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _{DC}								
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum average forward rectified current @ T _A =40 °C	I _O	3.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	80							A
Forward Voltage per element @IF=1.0A	V _{FM}	1.1							V
Peak Reverse Current @ T _A =25 °C	I _R	5.0							uA
At Rated DC Blocking Voltage @T _A =125°C		500							
Typical Junction Capacitance per leg (Note 1)	C _J	35							pF
Typical Thermal Resistance per leg (Note 2)	R _{θJA}	55							°C/W
	R _{θJL}	16							
Operating and Storage Temperature Range	T _J , T _{STG}	-55to+150							°C

Note:1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B
with 0.5×0.5"(13×13mm)cop



Fig. 1 Output Current Derating Curve

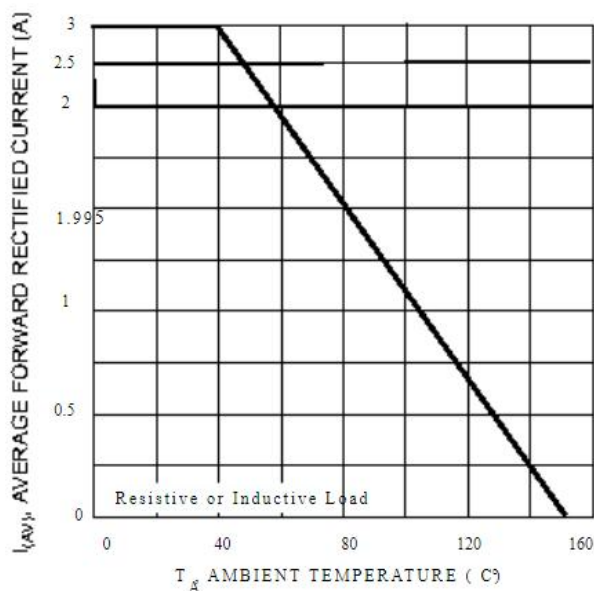


Fig.2 Typical Forward Characteristics (per leg)

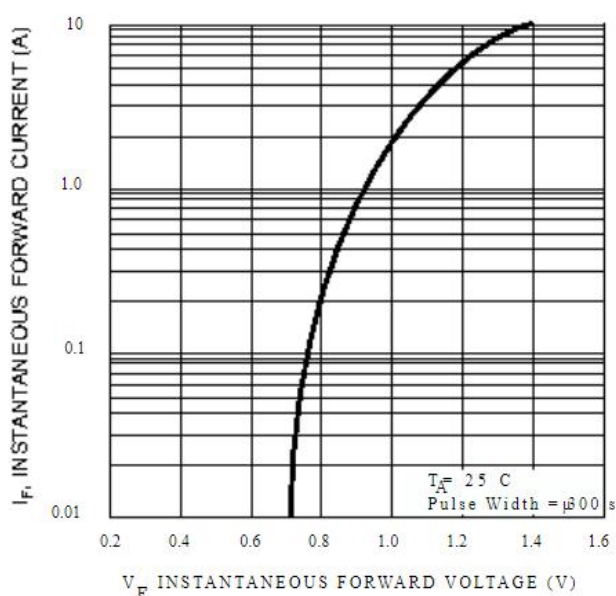


Fig. 3 Maximum Peak Forward Surge Current (per leg)

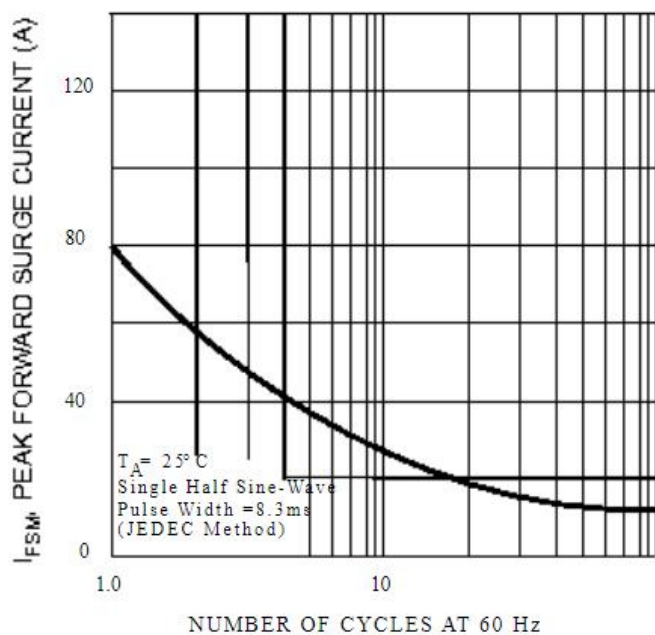


Fig 4 Typical Reverse Characteristics (per element)

