



# DB201S-DB207S

## SURFACE MOUNT BRIDGE RECTIFIERS

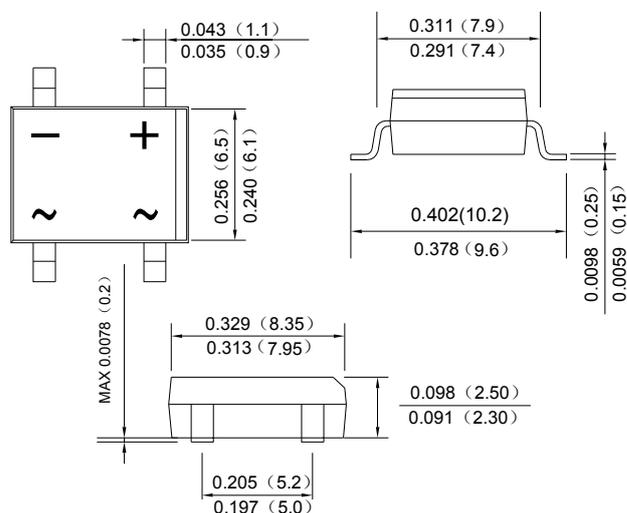
### Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0  
UL Recognized File # E476623

### Mechanical Data

- Case: DB-S, oldede 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,

### DB-S



Dimensions in inches and (millimeters)

### 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	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$								V
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	
DC Blocking Voltage	$V_{DC}$								
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@ $T_A=40^\circ\text{C}$	$I_o$	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60							A
Forward Voltage per element @ $I_F=2.0A$	$V_{FM}$	1.1							V
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	5.0 500							$\mu\text{A}$
Typical Junction Capacitance per leg (Note 2)	$C_J$	25							pF
Typical Thermal Resistance per leg	$R_{\theta JA}$	58							$^\circ\text{C}/\text{W}$
Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2 t$	6.35							$\text{A}^2\text{sec}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150							$^\circ\text{C}$

Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.





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### Characteristic Curves ( $T_A=25\text{ }^\circ\text{C}$ unless otherwise noted)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

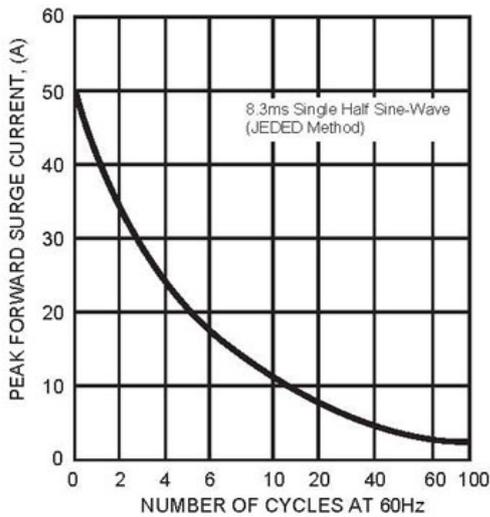


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

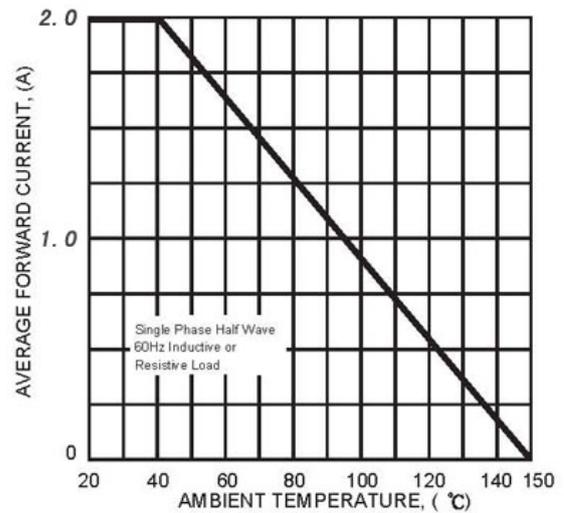


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

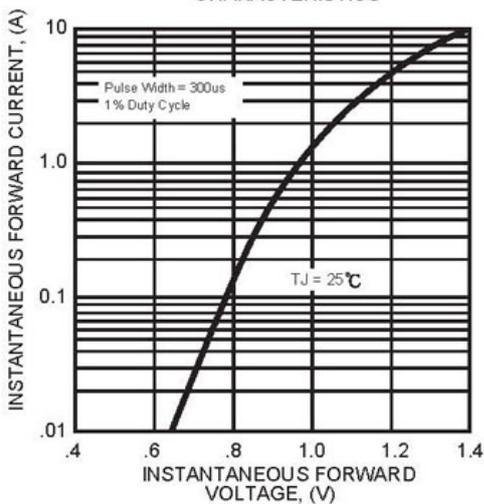


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

