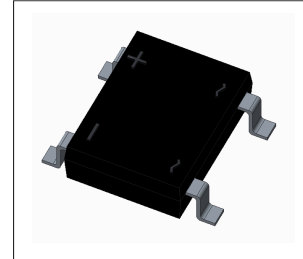


## Surface Mount Bridge-Rectifier

## DB201S—DB207S

### Features

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Ideal for printed circuit boards
- ◆ High surge current capability



### Mechanical Data

**Case:** DFS Molded plastic body

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

**High temperature soldering guaranteed:** 260°C/10 seconds

**Mounting Position:** Any

### Maximum Ratings & Electrical Characteristics

Ratings at TA = 25°C unless otherwise specified

Parameter	Symbol	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Average forward rectified output current	$I_{F(AV)}$	2.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60							A
Rating for fusig (t<8.3ms)	$I^2t$	15.0							A <sup>2</sup> sec
Maximum instantaneous forward voltage dropper leg at 2.0A	VF	1.10							V
Maximum DC reverse current at rated DC blocking voltage per leg	Tj=25°C	5.0							uA
	Tj=125°C	500							

### Thermal Characteristics

Typical thermal resistance per leg (Note 1)	$R_{\theta JA}$	68	°C/W
	$R_{\theta JL}$	15	
Operating junction temperature range	TJ	-55 to +150	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

#### Note

(1) Units mounted on PCB with 0.47×0.47(12×12mm) Copper Pads

# Surface Mount Bridge-Rectifier

# DB201S—DB207S

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

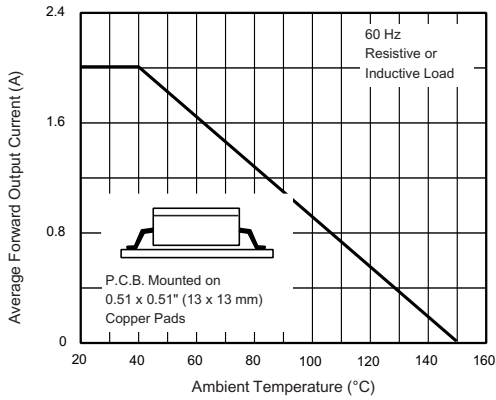


Figure 1. Derating Curve Output Rectified Current

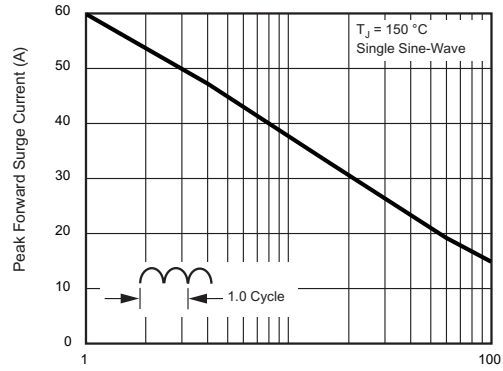


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

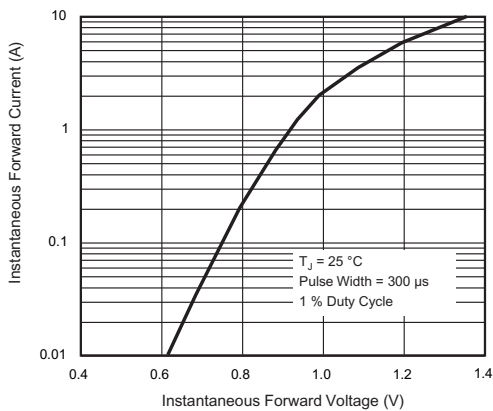


Figure 3. Typical Forward Characteristics Per Diode

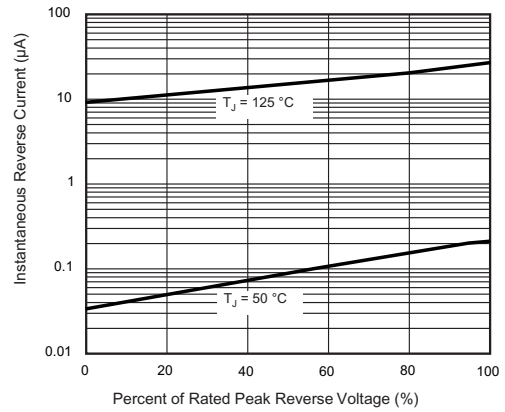


Figure 4. Typical Reverse Leakage Characteristics Per Diode

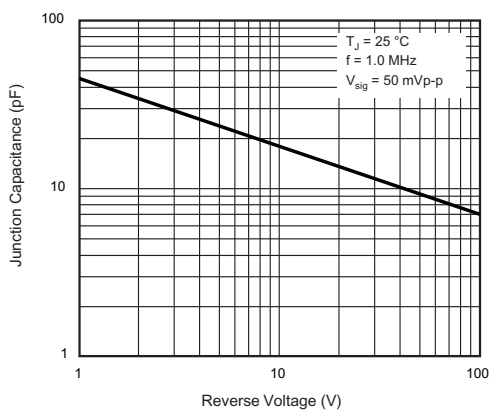


Figure 5. Typical Junction Capacitance Per Diode

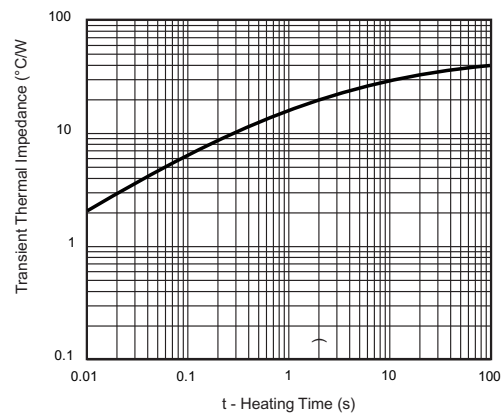
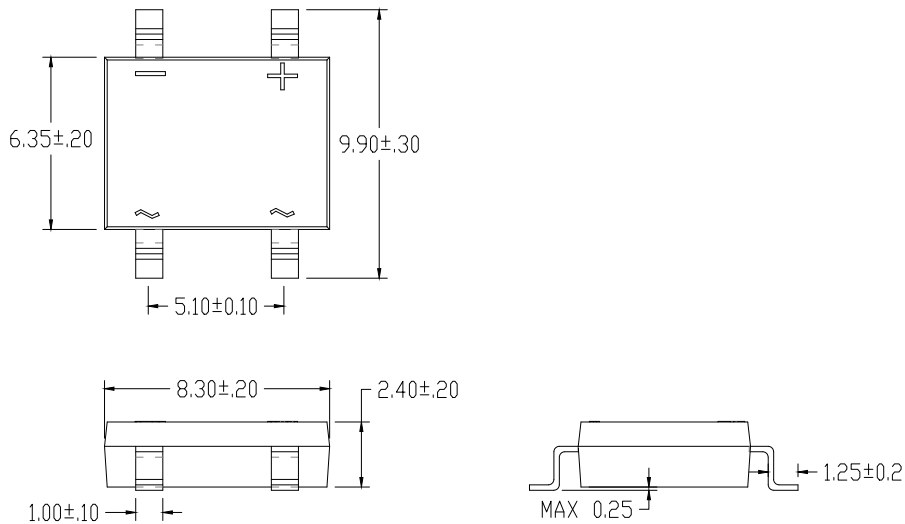


Figure 6. Typical Transient Thermal Impedance

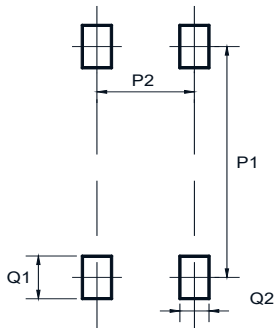
## Surface Mount Bridge-Rectifier

DB201S—DB207S

### Package Outline Dimensions(unit:mm)



### Mounting Pad Layout(unit:mm)



Dim	Min
P1	8.73
P2	5.12
Q1	2.22
Q2	1.2

### Ordering Information

Part No.	Marking	Package	Shipping
DB201S	DB201S	DFS	1500/Tape&Reel
DB202S	DB202S	DFS	1500/Tape&Reel
DB203S	DB203S	DFS	1500/Tape&Reel
DB204S	DB204S	DFS	1500/Tape&Reel
DB205S	DB205S	DFS	1500/Tape&Reel
DB206S	DB206S	DFS	1500/Tape&Reel
DB207S	DB207S	DFS	1500/Tape&Reel