

# KI SEMICONDUCTOR

## DB201S THRU DB207S

### Features

- Surface Mount Package
- Glass Passivated Diode Construction
- High Surge Current Capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

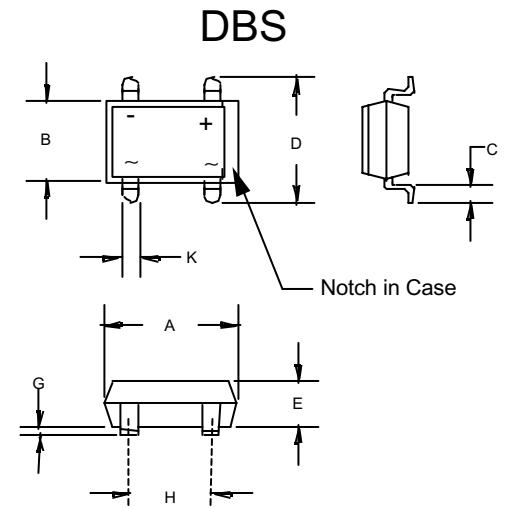
Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
DB201S	DB201S	50V	35V	50V
DB202S	DB202S	100V	70V	100V
DB203S	DB203S	200V	140V	200V
DB204S	DB204S	400V	280V	400V
DB205S	DB205S	600V	420V	600V
DB206S	DB206S	800V	560V	800V
DB207S	DB207S	1000V	700V	1000V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0 A	$T_A = 40^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	60A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.2V	$I_F = 2.0\text{A}; T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10µA 0.5mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	25pF	Measured at 1.0MHz, $V_R=4.0\text{V}$
Rating For Fusing	$I^2t$	14.9A <sup>2</sup> s	$t < 8.3\text{ms}$

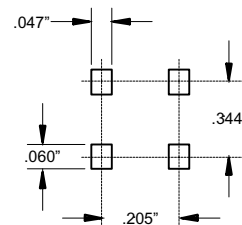
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

## 2 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.316	.335	8.05	8.51	
B	.245	.255	6.20	6.50	
C	.040	.060	1.02	1.50	
D	.360	.410	9.40	10.4	
E	.102	.130	2.60	3.30	
G	.003	.013	.076	.330	
H	.195	.205	5.00	5.20	
K	.038	.047	1.00	1.20	

### Suggested Solder Pad Layout



# DB201S thru DB207S

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

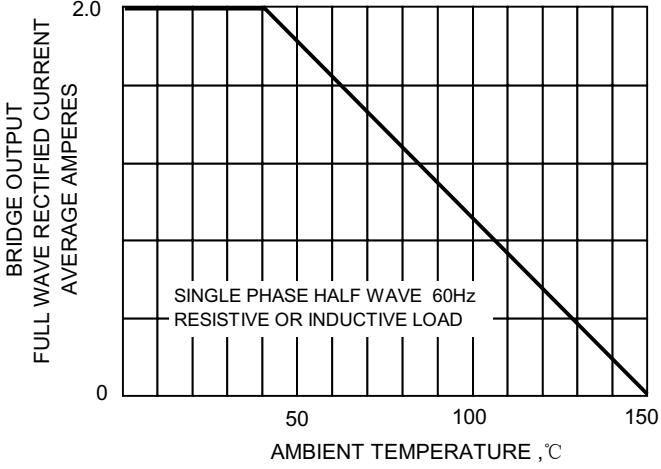


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

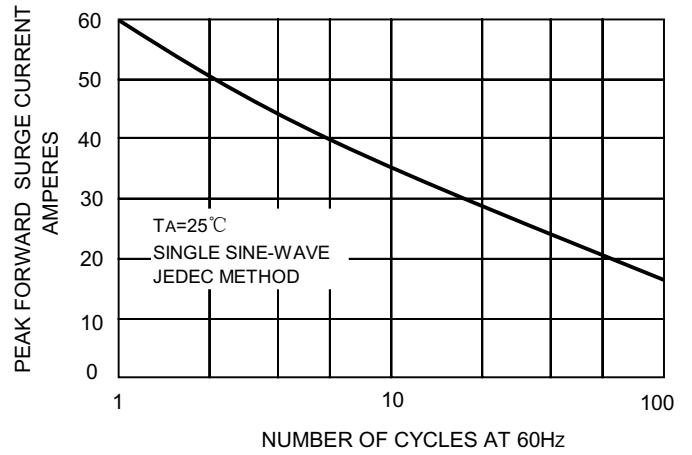


FIG.3-TYPICAL JUNCTION CAPACITANCE

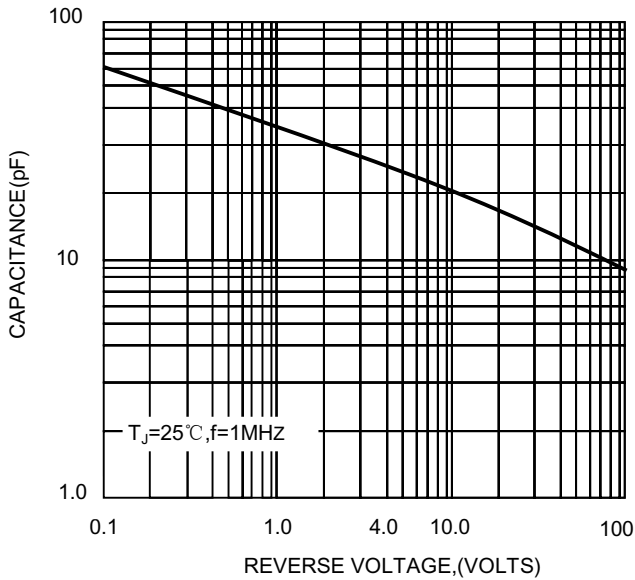


FIG.4-TYPICAL FORWARD CHARACTERISTICS

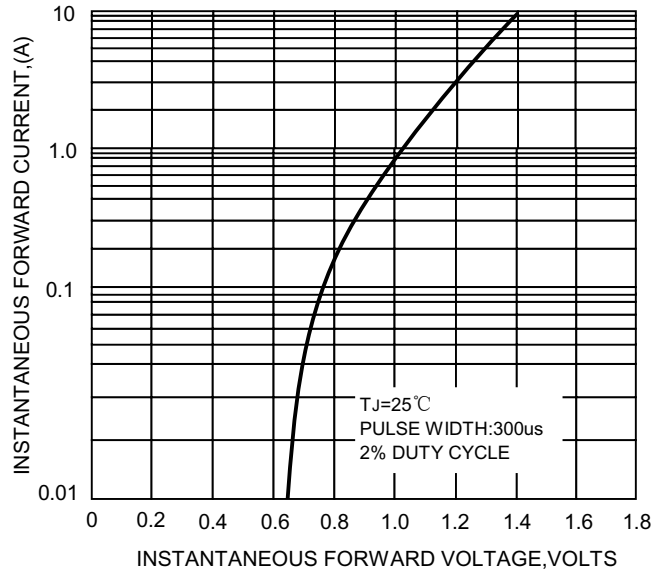


FIG.5-TYPICAL REVERSE CHARACTERISTICS

