

## Silicon Bridge Rectifiers

## DB204S - DB207S

### Features

- Glass passivated junction
- High surge current capability
- Saves space on printed circuit boards
- High-temp soldering guaranteed: 260°C @ 10s.
- RoHS compliant with Halogen-free



### Mechanical Data

- Case: DFS molded plastic
- Molding compound meets UL 94 V-0 flammability rating
- Terminals: Lead Free Plating (Matte Tin Finish.)
- Polarity indicator: As marked on body

### Maximum Ratings (@ T<sub>A</sub> = 25°C unless otherwise specified)

Parameter	Symbol	DB204S	DB205S	DB206S	DB207S	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	400	600	800	1000	V
RMS Reverse Voltage	V <sub>RMS</sub>	280	420	560	700	V
DC Blocking Voltage	V <sub>DC</sub>	400	400	800	1000	V
Maximum Average Forward Output Current	I <sub>F_AV</sub>	2.0				A
Peak Forward Surge Current, 8.3ms Single Half Sine wave	I <sub>FSM</sub>	60				A
I <sup>2</sup> t Rating for fusing	I <sup>2</sup> t	14.9				A <sup>2</sup> s

### Thermal Characteristics

Parameter	Symbol	DB204S	DB205S	DB206S	DB207S	Unit
Typical Thermal Resistance per leg *1	R <sub>θJA</sub>	70				°C/W
	R <sub>θJC</sub>	31				
	R <sub>θJL</sub>	29				
Operating Junction Temperature Range	T <sub>J</sub>	-55 ~ +150				°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150				°C

Note \*1: Device mounted on p.c.b. with 10 mm x 20 mm x 0.1mm copper pad area

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### Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

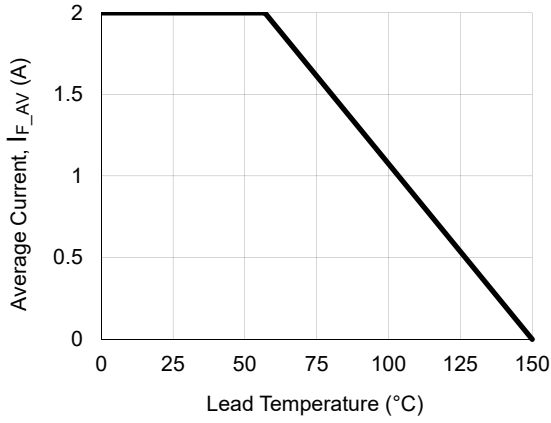
Parameter	Symbol	Test Condition	Typ.	Max.	Unit	
Maximum Instantaneous Forward Voltage	$V_F$	$I_F = 2.0\text{A}$ Per Diode	-	1.1	V	
Maximum Reverse Current	$I_R$	Rated $V_R$ , Per Diode	@ $T_A = 25^\circ\text{C}$	-	10	$\mu\text{A}$
			@ $T_A = 100^\circ\text{C}$	-	100	

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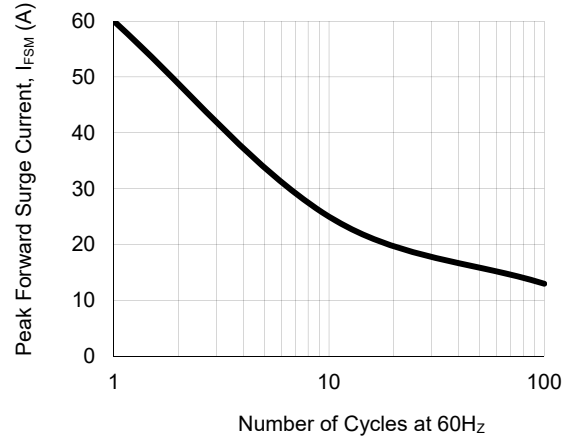
## DB204S - DB207S

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

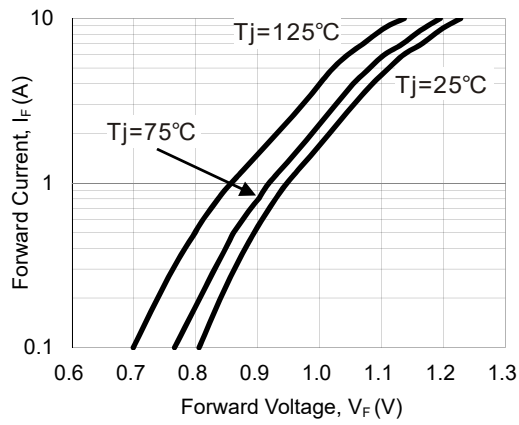
**Fig.1 Forward Current Derating Curve**



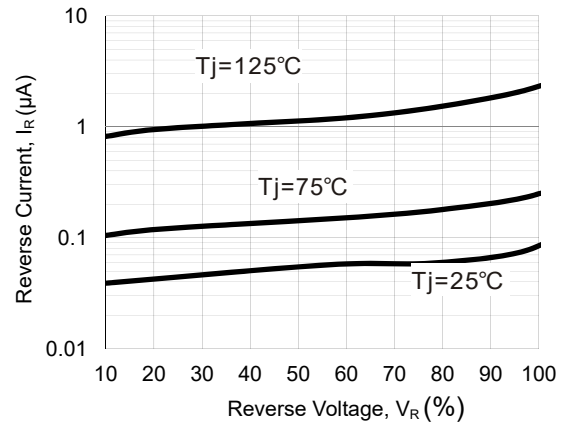
**Fig.2 Surge Current Derating Curve**



**Fig.3 Typical Forward Voltage Characteristics**



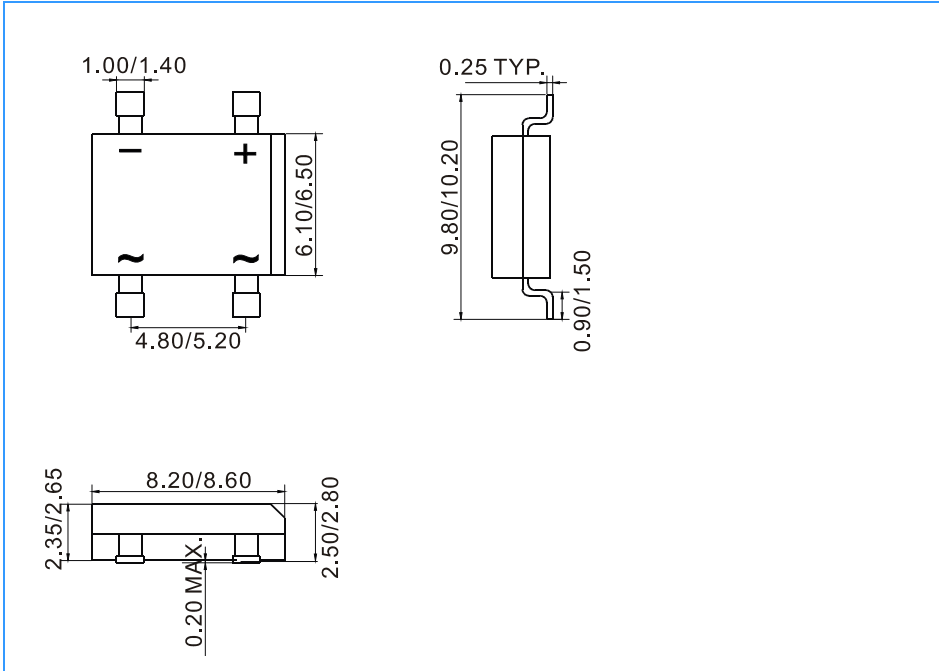
**Fig.4 Typical Reverse Characteristics**



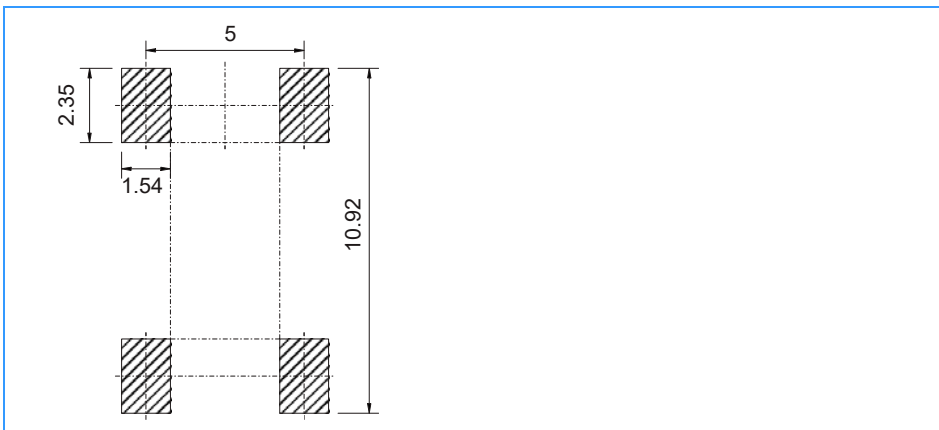
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### Package Outline Dimensions (Unit: mm)



### Mounting Pad Layout (Unit: mm)



### Ordering Information

Part Number	Marking	Package	Shipping Quantity
DB204S	DB204S	DFS	1500 / Tape & Reel
DB205S	DB205S	DFS	1500 / Tape & Reel
DB206S	DB206S	DFS	1500 / Tape & Reel
DB207S	DB207S	DFS	1500 / Tape & Reel