

## DBS Plastic-Encapsulate Bridge Rectifier

### General Purpose Bridge Rectifier

#### Features:

- $I_{F(AV)}$  1A
- $V_{RRM}$  50V-1000V
- High surge current capability
- Glass passivated chip

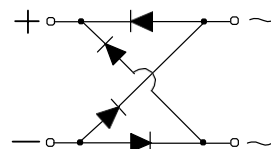
#### Applications:

- General purpose 1 phase Bridge rectifier applications

#### Marking

- DB10XGS  
X : From 01 To 7

DB-1S



### Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	DB1						
				01GS	02GS	03GS	04GS	05GS	06GS	07GS
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	$V_{RMS}$	V		35	70	140	280	420	560	700
Average Rectified Output Current	$I_o$	A	$T_a=25^{\circ}C$ 60Hz sine wave, R-load, $T_a=25^{\circ}C$	On glass-epoxi substrate		1.0				
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz halfsine wave, 1 cycle, $T_j=25^{\circ}C$		50					
Current Squared Time	$I^2t$	A <sup>2</sup> S	$1ms \leq t < 8.3ms$ $T_j=25^{\circ}C$ , Rating of per diode		23.3					
Operation Junction and Storage Temperature Range	$T_j, T_{stg}$	$^{\circ}C$			-55 ~+150					

### Electrical Characteristics ( $T_a=25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	$V_{FM}$	V	$I_{FM}=1.0A$ , Pulse measurement, Rating of per diode	1.0
Peak Reverse Current	$I_{RRM}$	$\mu A$	$V_{RM}=V_{RRM}$ , Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient, On glass-epoxi substrate	25
	$R_{\theta J-L}$		Between junction and lead	15

**Typical Characteristics**

FIG.1: FORWARD CURRENT DERATING CURVE

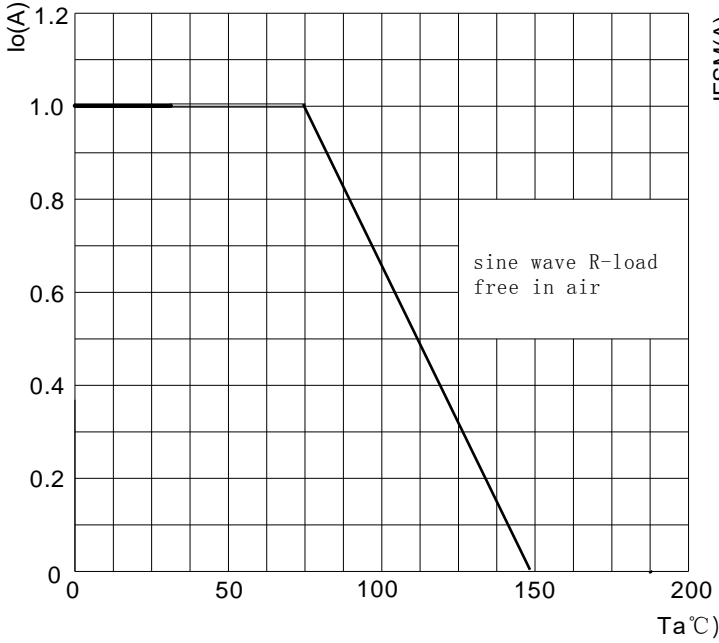


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

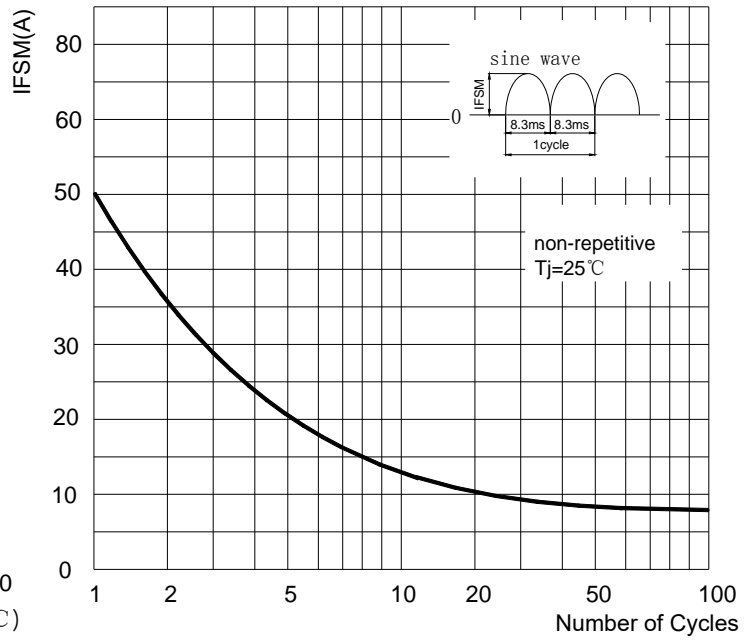


FIG.3: TYPICAL FORWARD CHARACTERISTICS

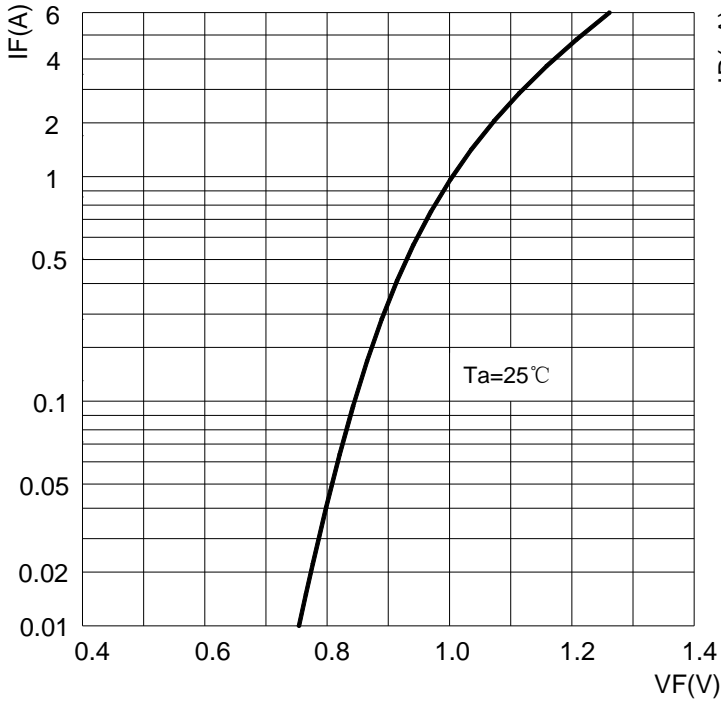
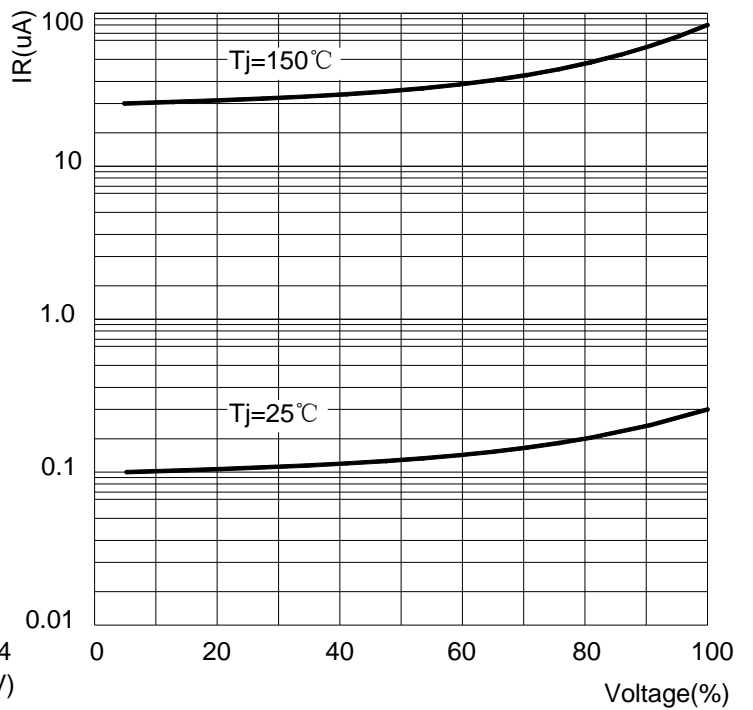
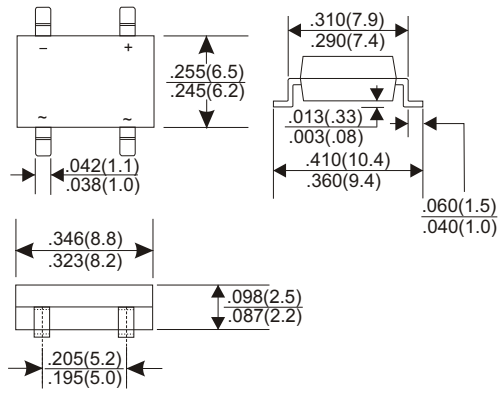


FIG.4: TYPICAL REVERSE CHARACTERISTICS

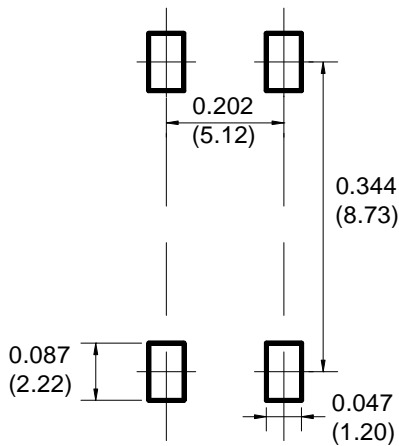


### DB-1S Package Outline Dimensions



Dimensions in inches and (millimeters)

### DB-1S Suggested Pad Layout



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05$ mm.
3. The pad layout is for reference purposes only.