



**DBS Plastic-Encapsulate Bridge Rectifier**

**DB101S THRU DB107S General Purpose Bridge Rectifier**

**Features**

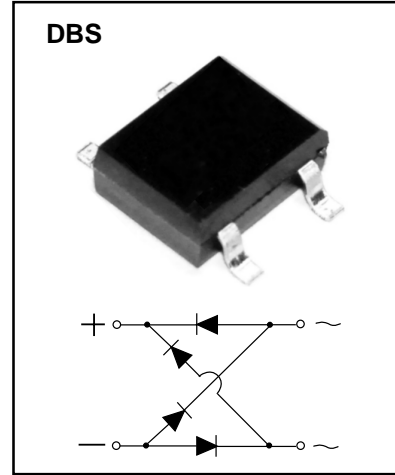
- $I_{F(AV)}$  1A
- $V_{RRM}$  50V-1000V
- High surge current capability
- Glass passivated chip

**Applications**

- General purpose 1 phase Bridge rectifier applications

**Marking**

- DB10XS
- X : From 01 To 7



**Limiting Values (Absolute Maximum Rating)**

Item	Symbol	Unit	Conditions	DB1						
				01S	02S	03S	04S	05S	06S	07S
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 half sine wave, 1 cycle, $T_j=25^{\circ}C$		30					
Current Squared Time	$I^2t$	$A^2S$	$1ms \leq t < 8.3ms$ $T_j=25^{\circ}C$ , Rating of per diode		3.7					
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	$I_{FM}=0.5A$ , Pulse measurement, Rating of per diode	1.05
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	68
	$R_{\theta J-L}$		Between junction and lead	15

# Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

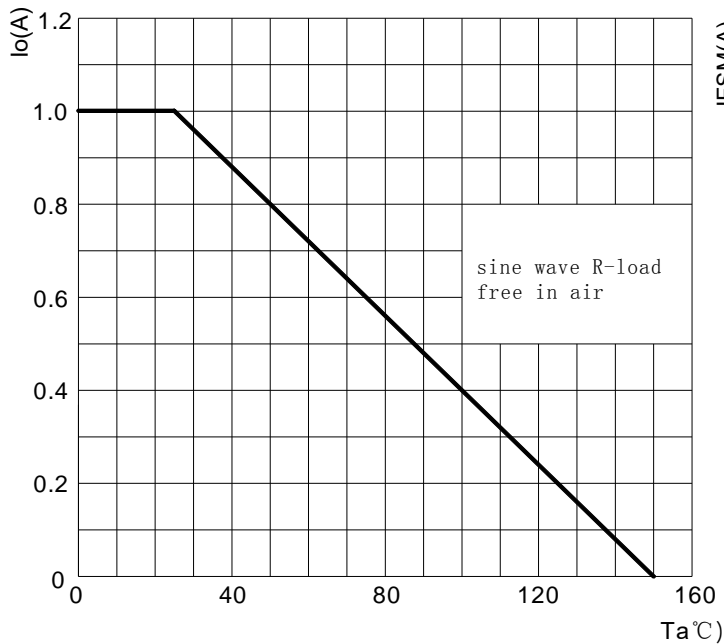


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

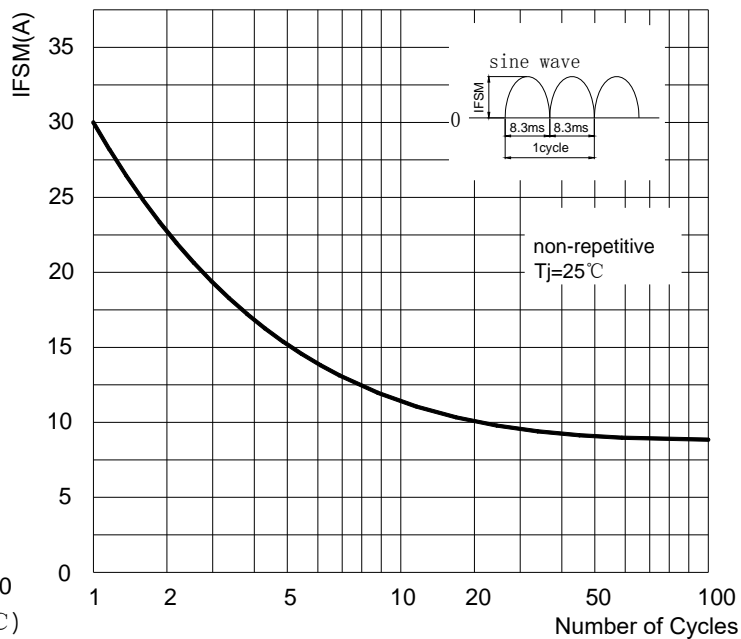


FIG.3: TYPICAL FORWARD CHARACTERISTICS

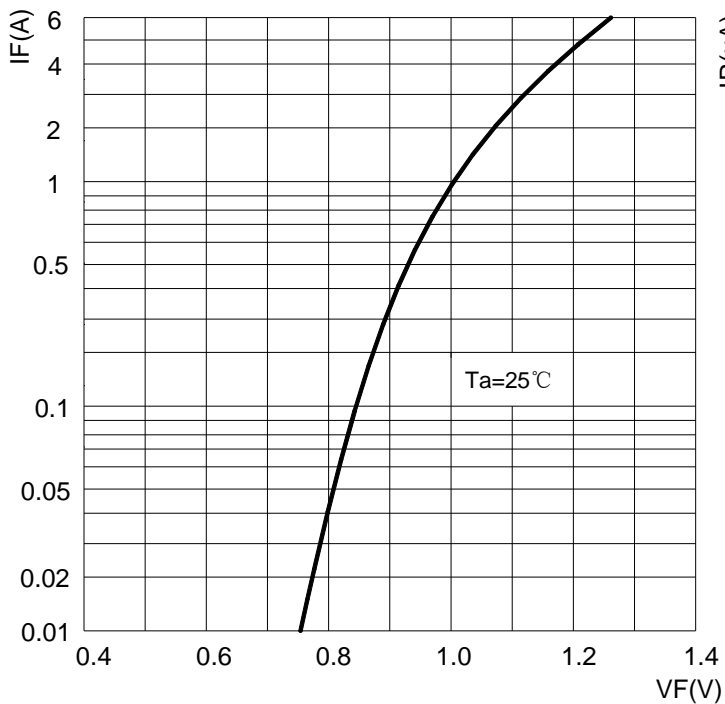
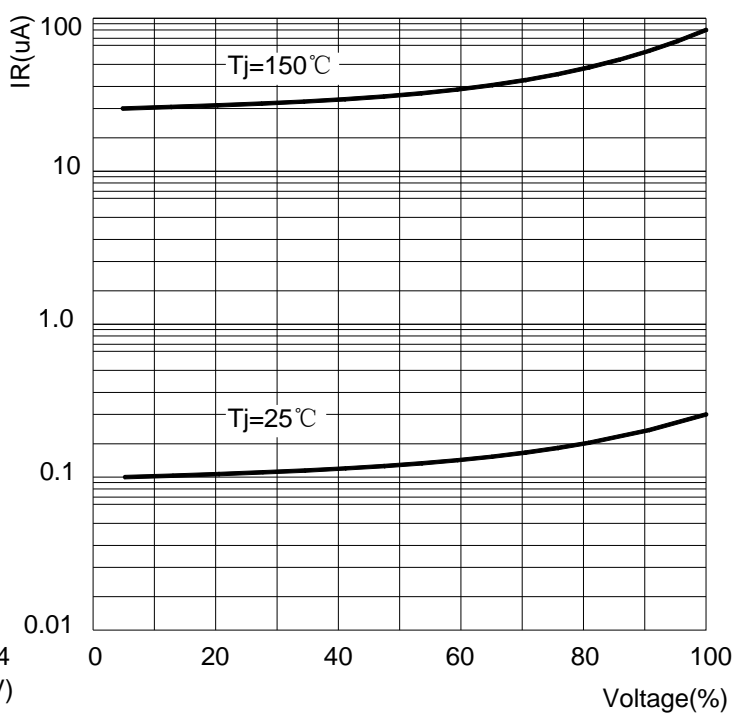
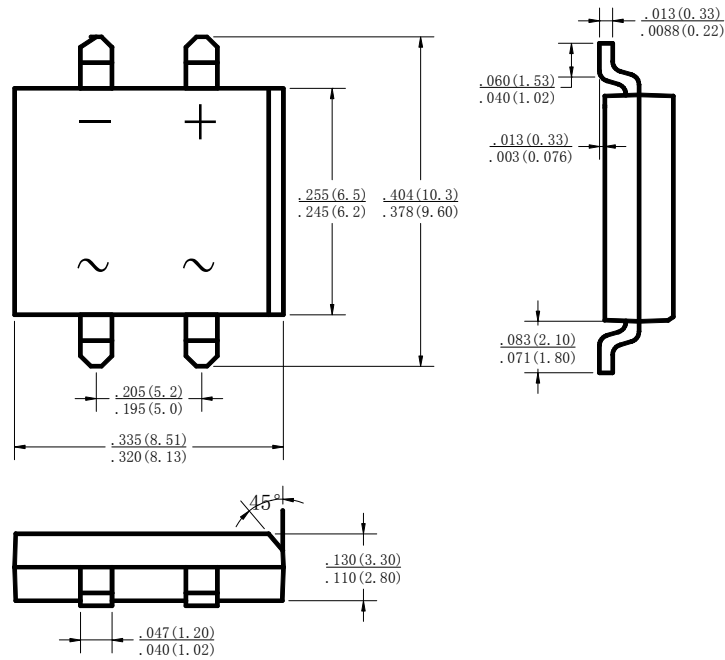


FIG.4: TYPICAL REVERSE CHARACTERISTICS

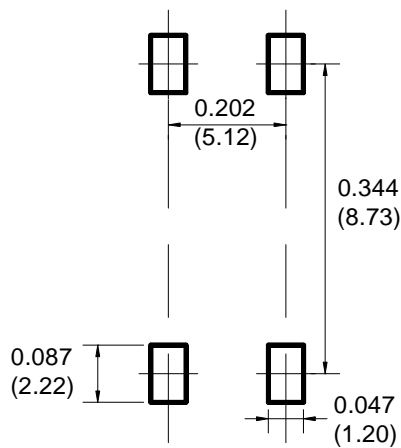


## DBS Package Outline Dimensions



Dimensions in inches and (millimeters)

## DBS 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.

### NOTICE

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