



DB Plastic-Encapsulate Bridge Rectifier

DB101-107 Bridge Rectifier

Features

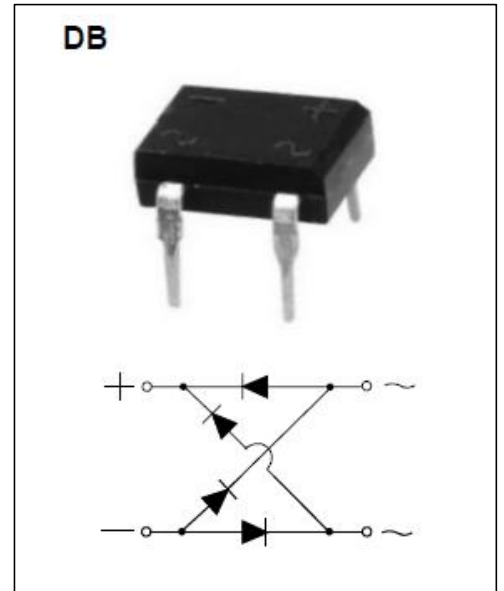
- I_O 1A
- V_{RRM} 50V-1000V
- High surge current capability
- Glass passivated chip
- Polarity:Color band denotes cathode
- AEC Q101 Qualified

Applications

- General purpose 1 phase Bridge rectifier applications

MARKING

- DB10X
X: From 1 To 7



ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

Item	Symbol	Unit	Conditions	DB1						
				01	02	03	04	05	06	07
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	60Hz sine wave, R-load, $T_a=25^{\circ}C$	1						
Surge(Non- repetitive)Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, $T_j=25^{\circ}C$	30						
Current Squared Time	I^2t	A ² S	$1ms \leq t < 8.3ms$ $T_j=25^{\circ}C$, Rating of per diode	3.7						
Storage Temperature	T_{stg}	$^{\circ}C$		-55 ~ +175						
Junction Temperature	T_j	$^{\circ}C$		-55 ~ +175						

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$ unless otherwise noted)

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}	μA	$V_{RM}=V_{RRM}$, 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 Electrical and Thermal Characteristics

FIG1: I_o - T_a Curve

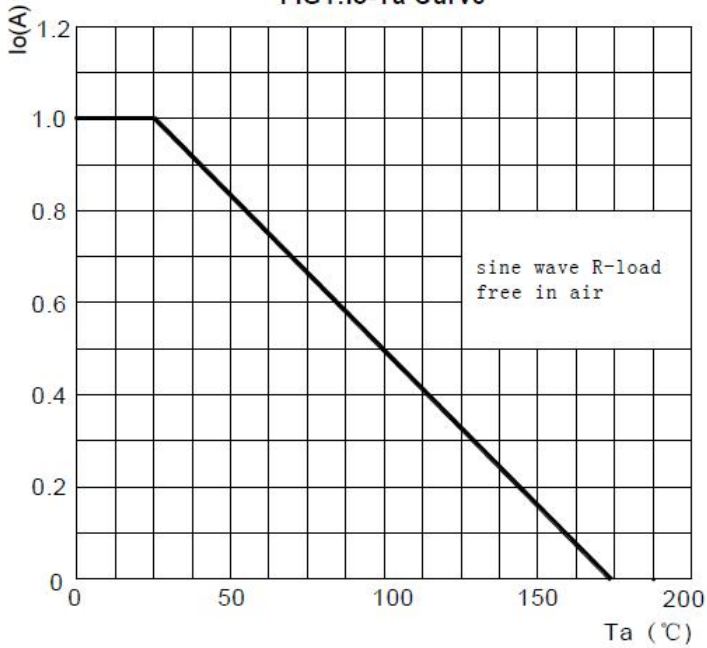


FIG2: Surge Forward Current Capacity

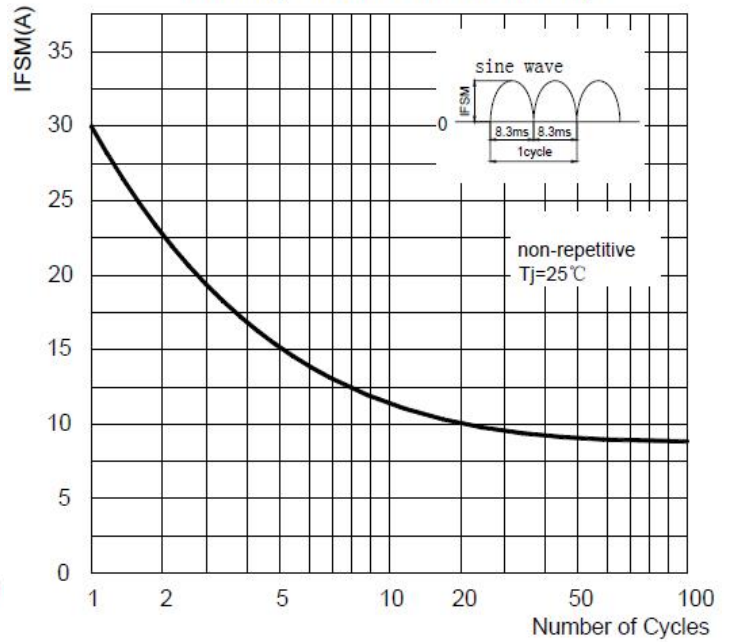


FIG3: Forward Voltage

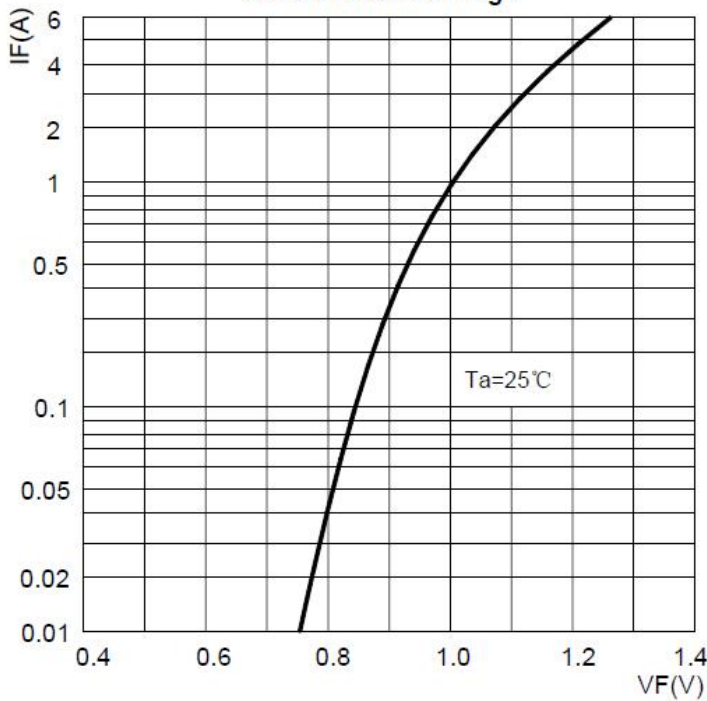
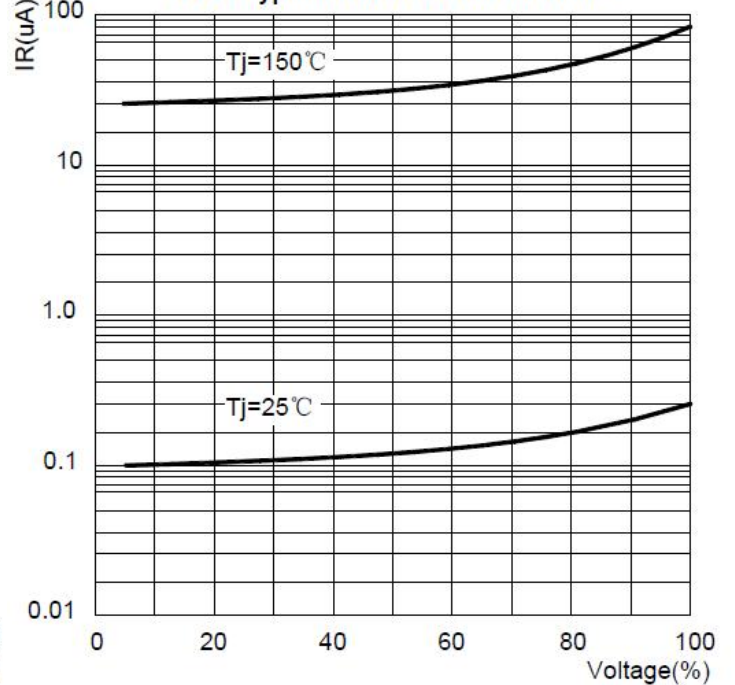
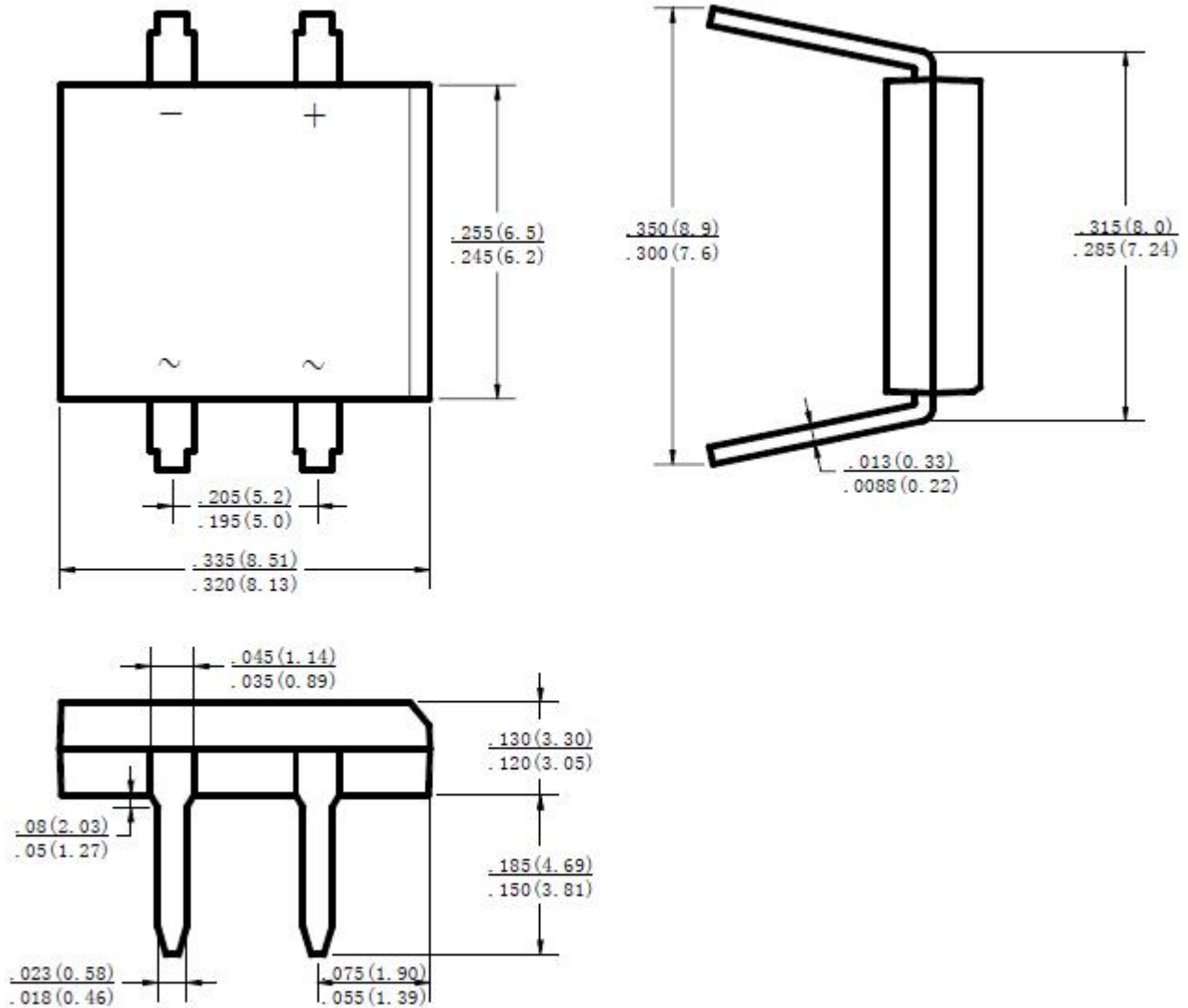


FIG4: Typical Reverse Characteristics



DB Package Outline Dimensions



Dimensions in inches and (millimeters)

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