

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application

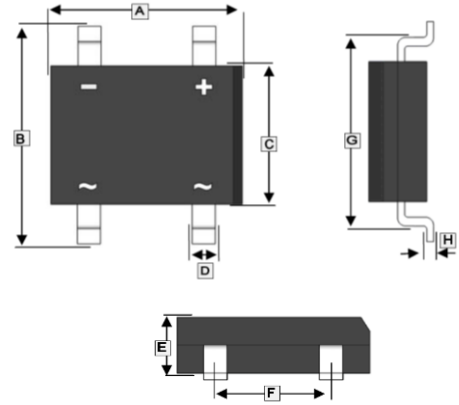
## APPLICATIONS

General Purpose 1 Phase Bridge Rectifier Applications

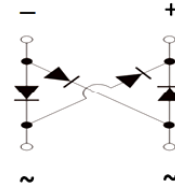
## ORDER INFORMATION

Part Number	Type
DB1501S-C~DB1507S-C	Lead (Pb)-free and Halogen-free

**DB-1S**



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	7.95	8.80	E	2.10	3.40
B	9.60	10.30	F	5.00	5.20
C	6.10	6.50	G	8.10 REF.	
D	0.90	1.20	H	0.15	0.35



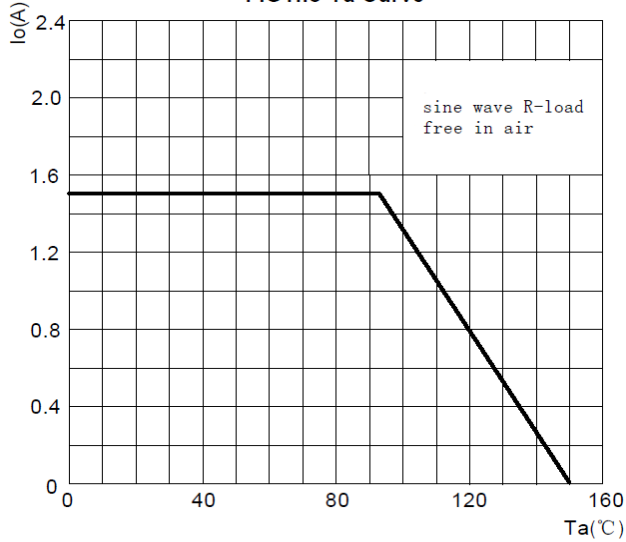
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, de-rate current by 20%.)

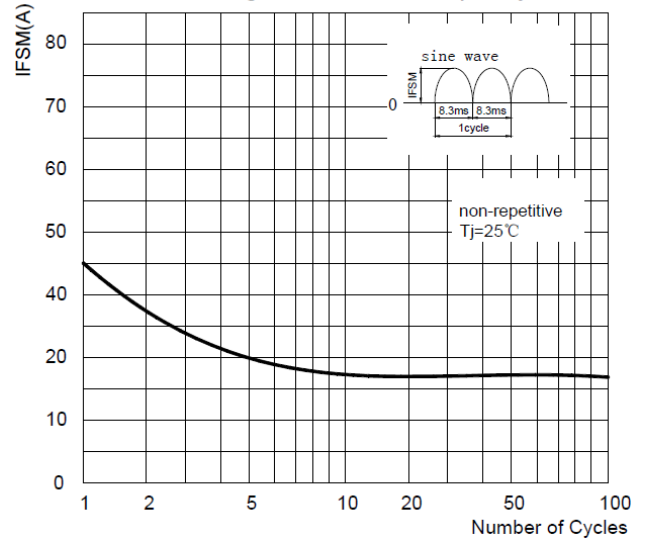
Parameter	Symbol	Part Number							Unit
		DB150 1S-C	DB150 2S-C	DB150 3S-C	DB150 4S-C	DB150 5S-C	DB150 6S-C	DB150 7S-C	
Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Average Rectified Output Current @60Hz Sine Wave	$I_O$	1.5							A
Surge (Non-Repetitive) Forward Current @60Hz Sine Wave, 1Cycle, $T_J=25^\circ\text{C}$	$I_{FSM}$	45							A
Maximum Forward Voltage @ $I_F=0.75\text{A}$	$V_{FM}$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_{RRM}$	10							$\mu\text{A}$
Current Squared Time @ $1\text{ms} \leq t < 8.3\text{ms}$ , $T_J=25^\circ\text{C}$	$I^2t$	8.5							$\text{A}^2\text{s}$
Typical Thermal Resistance	$R_{\theta JA}$	68							$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	15							
Operating & Storage Temperature Range	$T_J, T_{STG}$	-55~150							$^\circ\text{C}$

**TYPICAL CHARACTERISTIC CURVES**

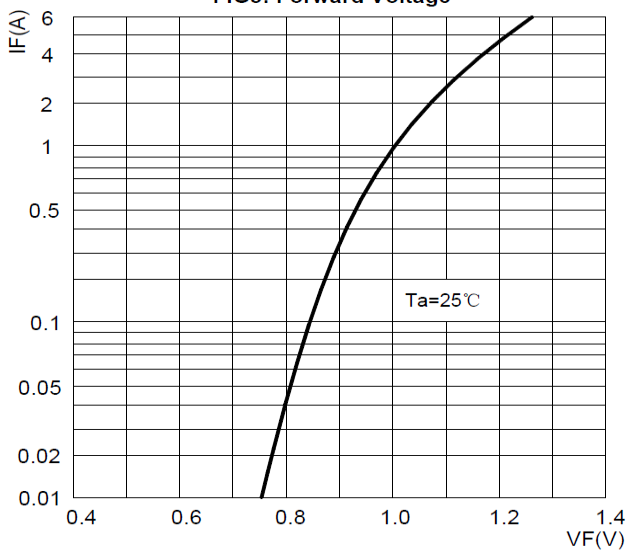
**FIG1:  $I_o$ - $T_a$  Curve**



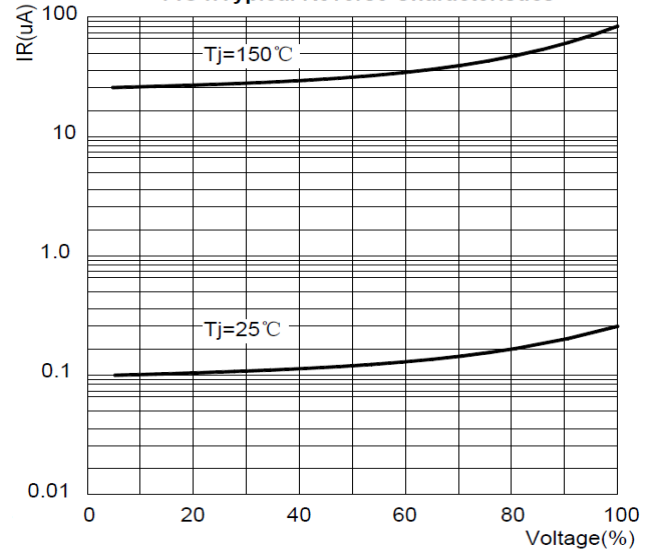
**FIG2: Surge Forward Current Capacity**



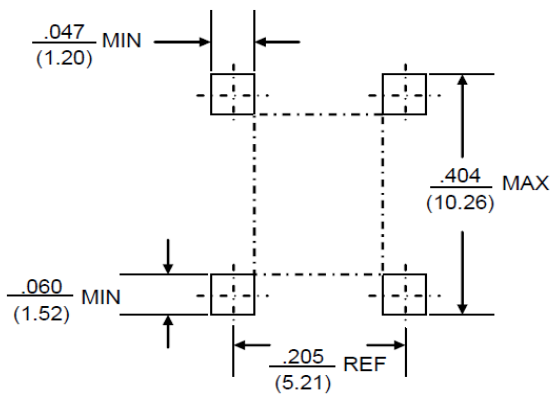
**FIG3: Forward Voltage**



**FIG4: Typical Reverse Characteristics**



**FIG.6 Mounting Pad Layout**



\*Dimensions in millimeters