

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

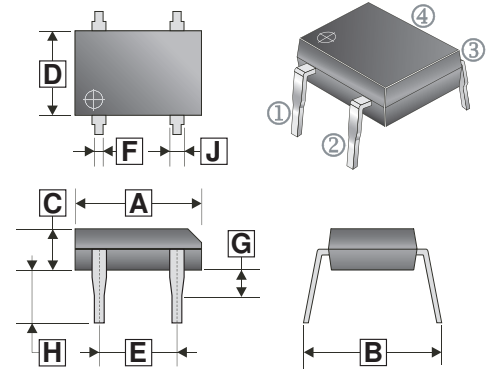
## FEATURES

- 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

**DB-1**



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	8.00	9.30	F	0.55	REF.
B	7.60	8.90	G	1.50	REF.
C	2.60	3.40	H	3.80	4.70
D	6.20	6.50	J	-	-
E	5.00	5.20			

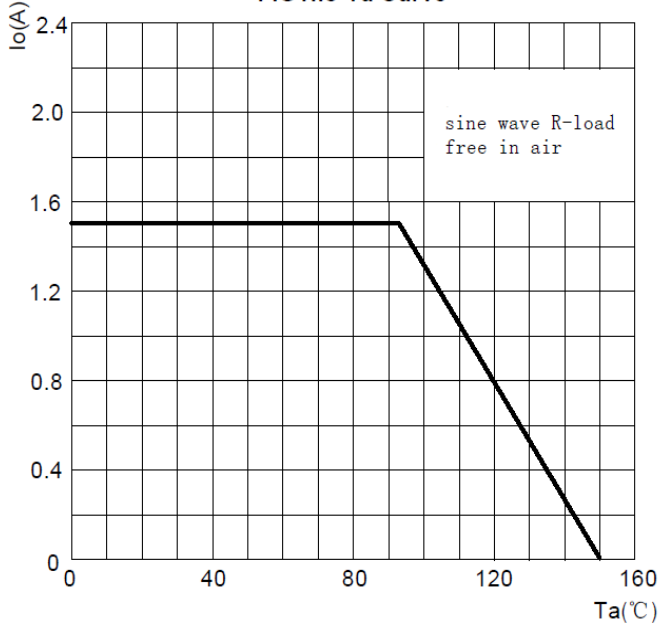
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(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%.)

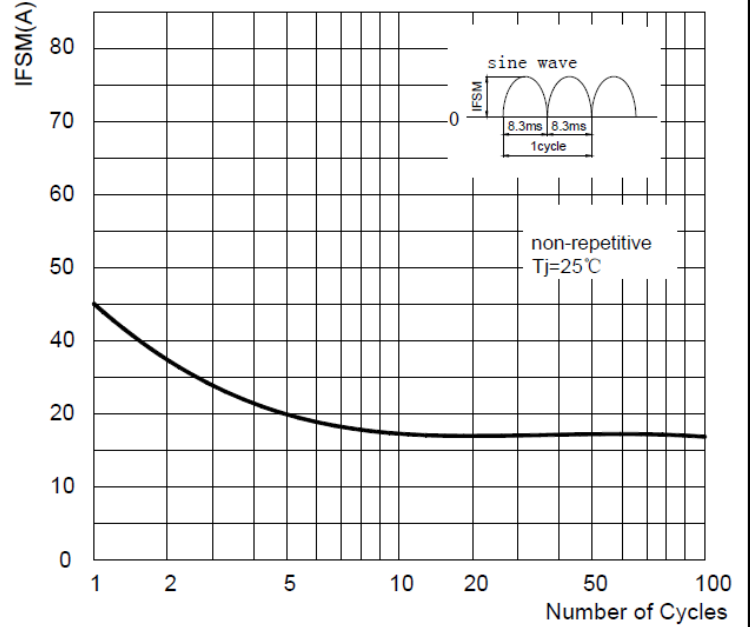
Parameter	Symbol	Part Number							Unit
		1501	1502	1503	1504	1505	1506	1507	
Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Average Rectified Output Current @60Hz Sine Wave	$I_O$	1.5							A
Surge (Non-Repetitive) Forward Current @60Hz Sine Wave, 1 Cycle, $T_J=25^\circ\text{C}$	$I_{FSM}$	45							A
Maximum Forward Voltage @ $I_F=1.5\text{A}$	$V_{FM}$	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 from Junction to Ambient	$R_{\theta JA}$	68							$^\circ\text{C}/\text{W}$
Typical Thermal Resistance from Junction to Lead	$R_{\theta JL}$	15							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55~150							$^\circ\text{C}$

**TYPICAL CHARACTERISTIC CURVES**

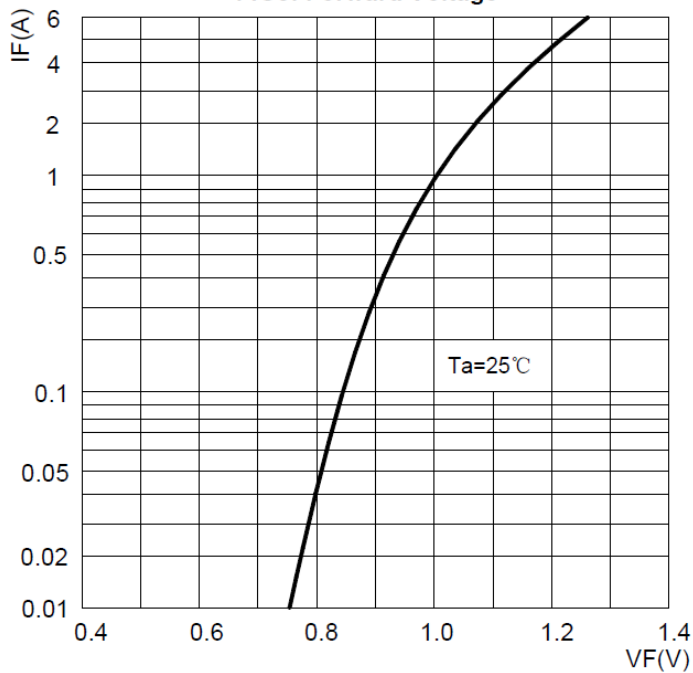
**FIG1:  $I_o$ - $T_a$  Curve**



**FIG2: Surge Forward Current Capability**



**FIG3: Forward Voltage**



**FIG4: Typical Reverse Characteristics**

