

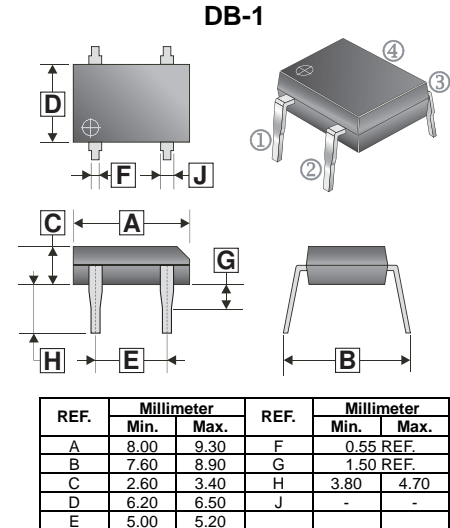
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

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



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
		DB101	DB102	DB103	DB104	DB105	DB106	DB107	
Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Average Rectified Output Current @60Hz Sine Wave	I_O	1							A
Surge (Non-Repetitive) Forward Current @60Hz Sine Wave, 1 Cycle, $T_J=25^\circ\text{C}$	I_{FSM}	30							A
Maximum Forward Voltage @ $I_F=0.5\text{A}$	V_{FM}	1.05							V
Peak Reverse Current	I_{RRM}	10							μA
Current Squared Time @ $1\text{ms} \leq t < 8.3\text{ms}$, $T_J=25^\circ\text{C}$	I^2t	3.7							A^2s
Typical Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	68							$^\circ\text{C/W}$
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

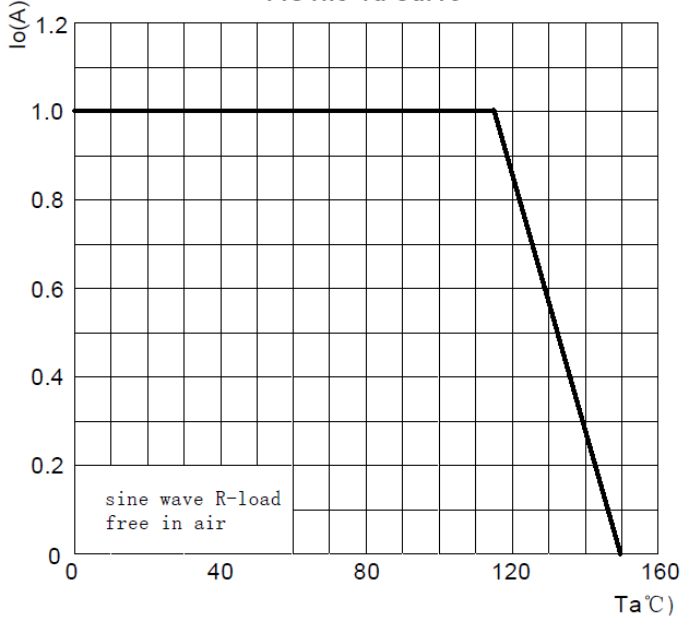


FIG2: Surge Forward Current Capadility

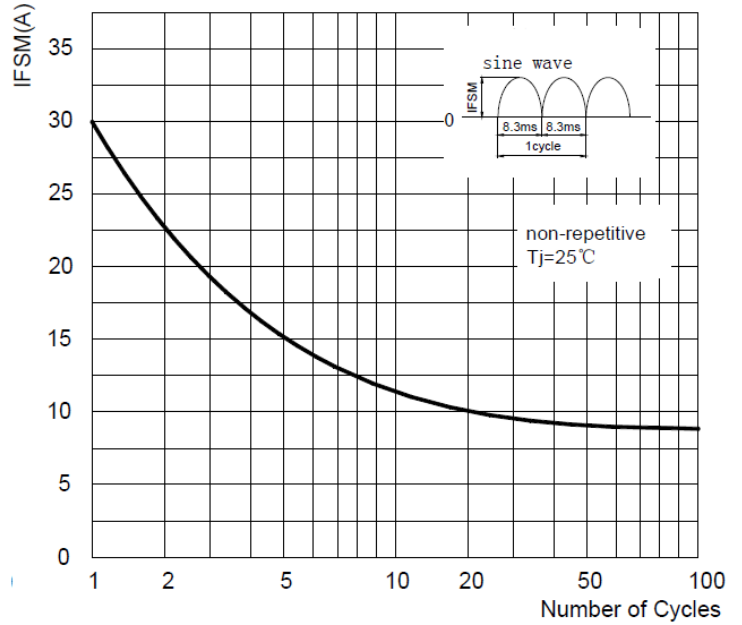


FIG3: Forward Voltage

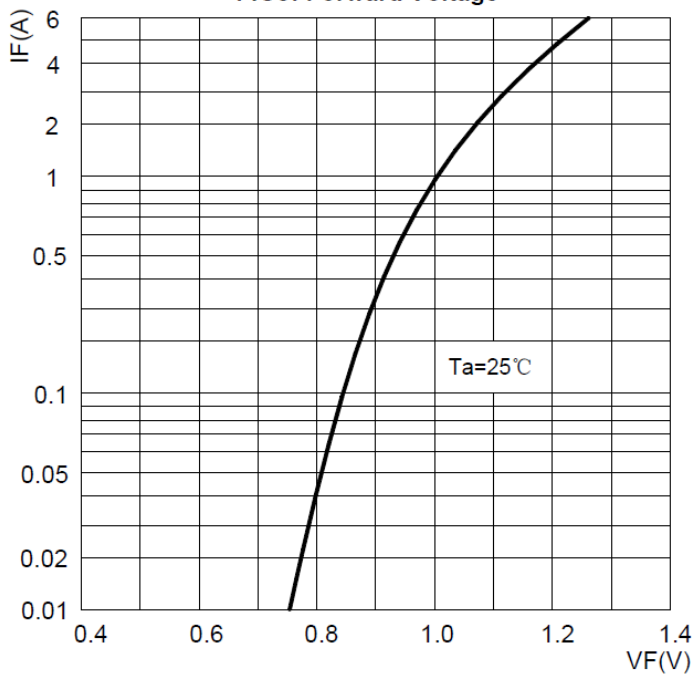


FIG4: Typical Reverse Characteristics

