

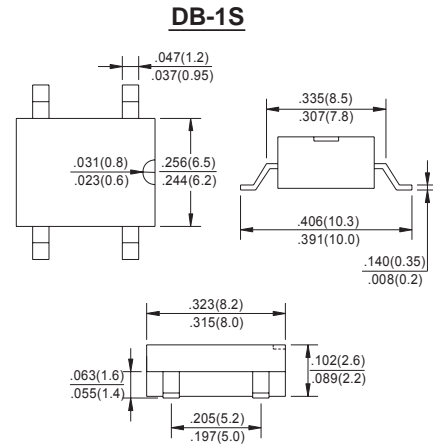
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Low forward voltage drop, high current capability
- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive products
- Lead tin Pb / Sn copper
- The plastic material has UL flammability classification 94V-0

## MECHANICAL DATA

- Polarity: As marked on Body
- Weight: 0.02 ounces, 0.38 grams
- Mounting position: Any



## 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%.

PARAMETERS	SYMBOL	DB 1501S	DB 1502S	DB 1503S	DB 1504S	DB 1505S	DB 1506S	DB 1507S	UNIT
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	
DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Current @ $T_A=40^\circ\text{C}$	$I_{(AV)}$	1.5							A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	$I_{FSM}$	50							A
Maximum Forward Voltage at 1.5 A DC	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	10 500							uA
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	10.4							$\text{A}^2\text{s}$
Typical Junction Capacitance Per Element (Note1)	$C_J$	25							pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
Operating and Storage temperature range	$T_J, T_{STG}$	-55 ~ 150							$^\circ\text{C}$

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC  
2. Thermal resistance from junction to ambient mounted on P.C.B. with 0.5\*0.5"(13\*13mm) copper pads.

**RATINGS AND CHARACTERISTIC CURVES**

FIG. 1 - Forward Current Derating Curve

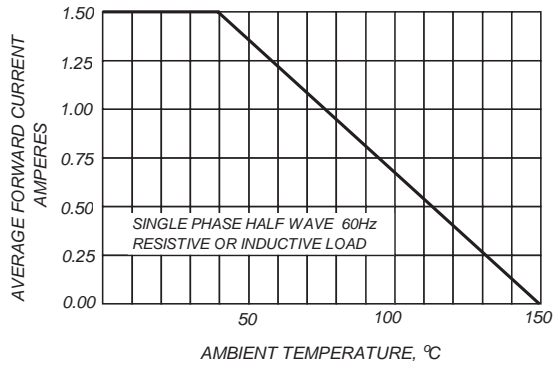


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

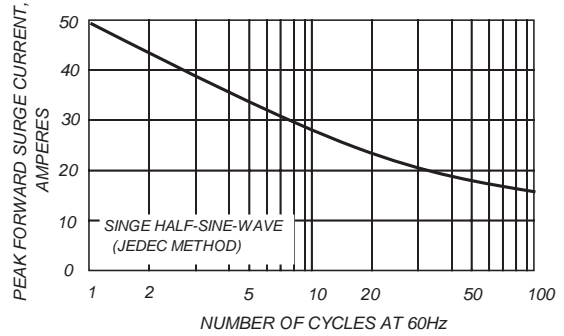


FIG.3-TYPICAL JUNCTION CAPACITANCE

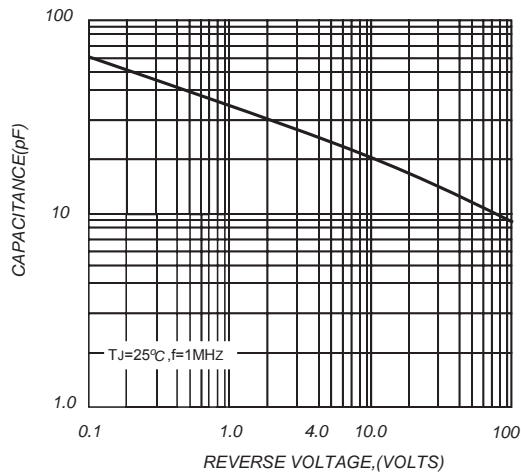


FIG.4-TYPICAL FORWARD CHARACTERISTICS

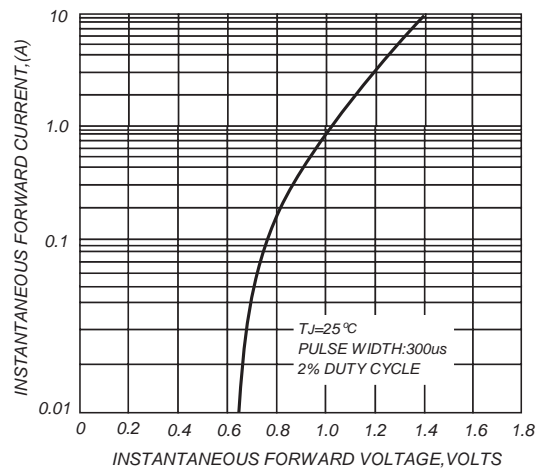


FIG.5-TYPICAL REVERSE CHARACTERISTICS

