

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

## FEATURES

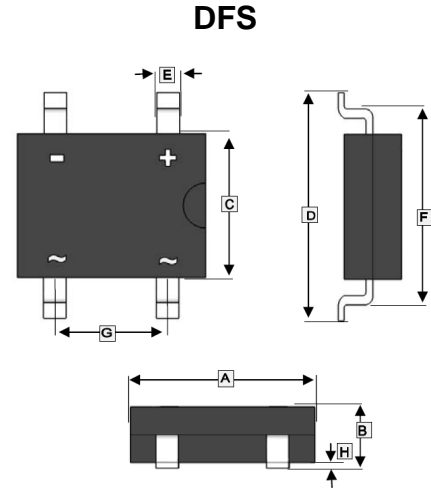
- Low forward voltage drop, high current capability
- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive products
- The plastic material has UL flammability classification 94V-0

## MECHANICAL DATA

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

## PACKAGE INFORMATION

Package	MPQ	Leader Size
DFS	1K	13 inch



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	8.0	8.2	E	0.9	1.2
B	2.2	2.6	F	7.8	8.5
C	6.2	6.2	G	5.0	5.2
D	10.0	10.3	H	0.2	0.4

## 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	Ratings							Unit
		DF 2005S	DF 201S	DF 202S	DF 204S	DF 206S	DF 208S	DF 210S	
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	V
DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A=40^\circ\text{C}$	$I_{(AV)}$	2.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	$I_{FSM}$	60							A
Maximum Forward Voltage @ 2 A DC	$V_F$	1.1							V
Maximum DC Reverse Current	$T_J=25^\circ\text{C}$	10							$\mu\text{A}$
	$T_J=125^\circ\text{C}$	500							
$I^2t$ Rating for Fusing ( $t<8.3\text{ms}$ )	$I^2t$	10.4							$\text{A}^2\text{s}$
Typical Junction Capacitance Per Element <sup>1</sup>	$C_J$	25							pF
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JA}$	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-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

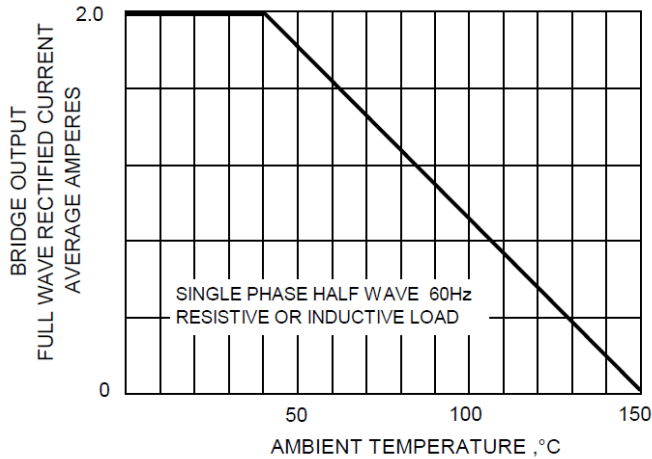


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

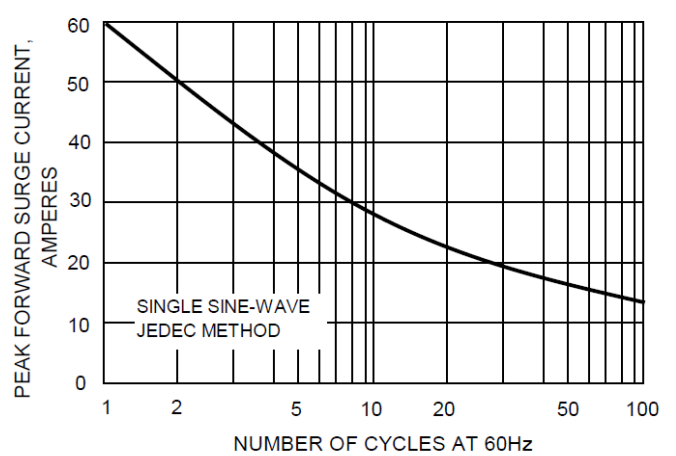


FIG.3-TYPICAL JUNCTION CAPACITANCE

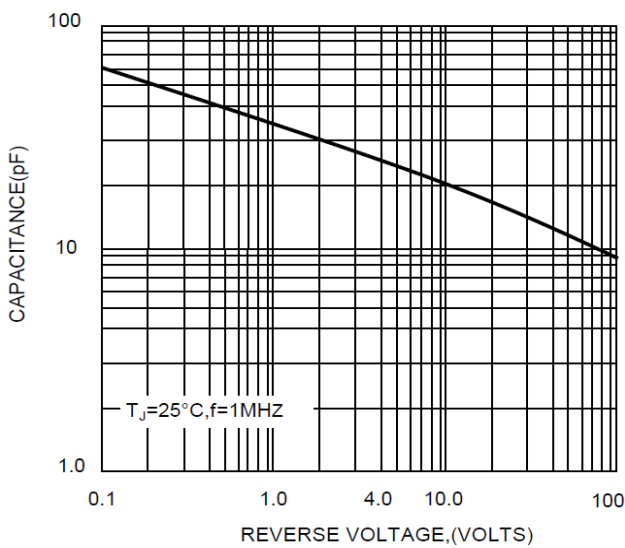


FIG.4-TYPICAL FORWARD CHARACTERISTICS

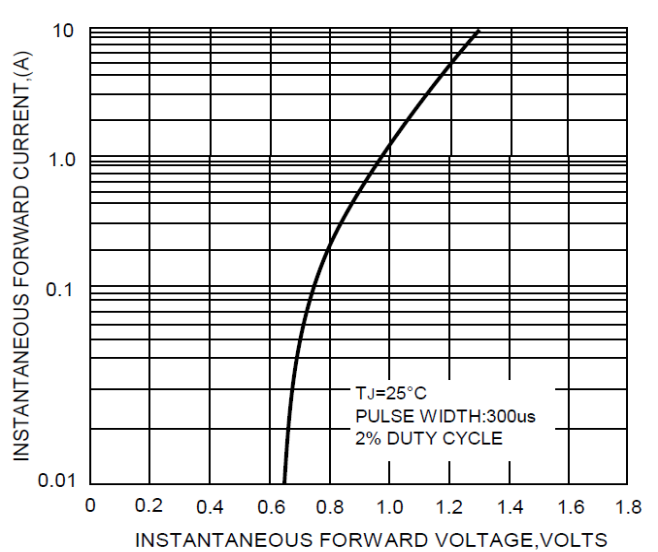


FIG.5-TYPICAL REVERSE CHARACTERISTICS

