

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

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 30 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208
- Lead: silver plated copper, soldered plated
- Plastic material has UL flammability classification 94V-0

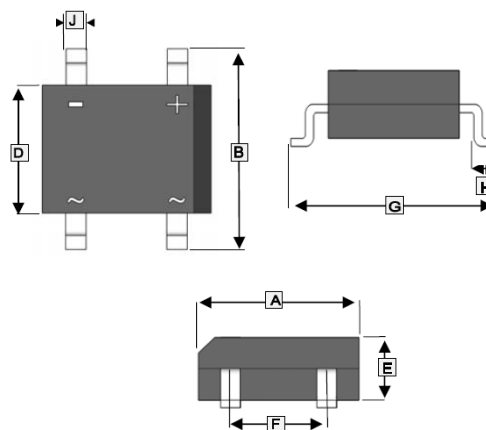
MECHANICAL DATA

- Polarity: As marked on Body
- Weight: 0.016 ounces, 0.45 grams
- Mounting position: Any

PACKAGE INFORMATION

Package	MPQ	Leader Size
DB-1SA	1.5K	13 inch

DB-1SA



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	8.20	8.40	H	0.90	1.50
B	8.00	8.60	J	0.90	1.10
D	6.10	6.50			
E	2.35	2.65			
F	4.80	5.20			
G	9.40	10.6			

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 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
		FDB 101S	FDB 102S	FDB 103S	FDB 104S	FDB 105S	FDB 106S	FDB 107S	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Current @ $T_A=25^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30							A
Maximum Forward Voltage @ 1.0 A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	10							μA
	$T_A=100^\circ\text{C}$	1							mA
Maximum Reverse Recovery Time ¹	T_{RR}	150			250	500		ns	
Operating and Storage temperature range	T_J, T_{STG}	-55~125, -55~150							$^\circ\text{C}$

Notes:

1. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{RR}=0.25\text{A}$

RATINGS AND CHARACTERISTIC CURVES

FIG.1 – PEAK FORWARD SURGE CURRENT

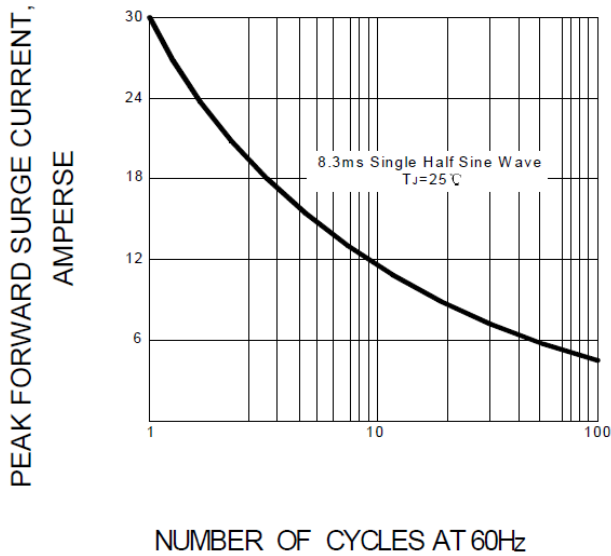


FIG.2 – FORWARD DERATING CURVE

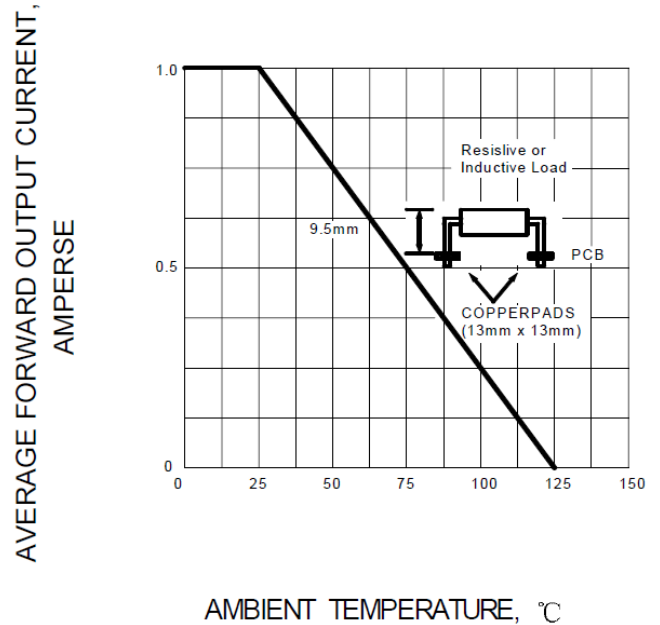


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

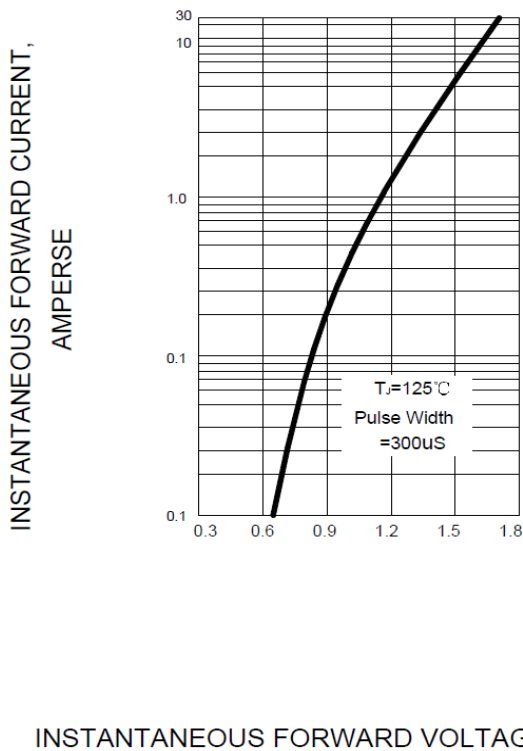


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

