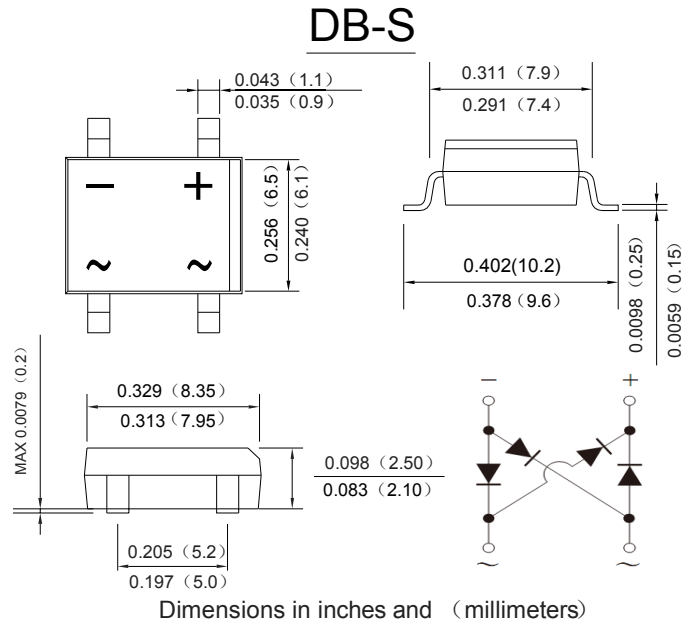


Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: DB-S, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version



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, derate current by 20%.

TYPE NUMBER	SYMBOL	UDB 201S	UDB 202S	UDB 203S	UDB 204S	UDB 205S	UDB 206S	UDB 207S	UNITS	
Peak Repetitive Reverse Voltage	V_{RRM}									
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	V	
DC Blocking Voltage	V_{DC}									
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Average Rectified Output Current (Note 1)@ $T_c=100^\circ C$	$I_{F(AV)}$	2.0							A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60							A	
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	14.94							A^2s	
Forward Voltage per element @ $I_F=2.0A$	V_{FM}	1.0		1.3		1.7			V	
Peak Reverse Current @ $T_A=25^\circ C$ At Rated DC Blocking Voltage @ $T_A=125^\circ C$	I_R	5.0				200				μA
Maximum reverse recovery time (Note 3)	T_{RR}	50				75				ns
Typical Junction Capacitance per leg (Note 2)	C_J	25							pF	
Typical Thermal Resistance per leg	$R_{\theta JA}$	40							$^\circ C/W$	
	$R_{\theta JL}$	15								
Operating and Storage Temperature Range	T_J, T_{STG}	-55to+150							$^\circ C$	

Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

UDB201S THRU UDB207S

Fig. 1 Output Current Derating Curve

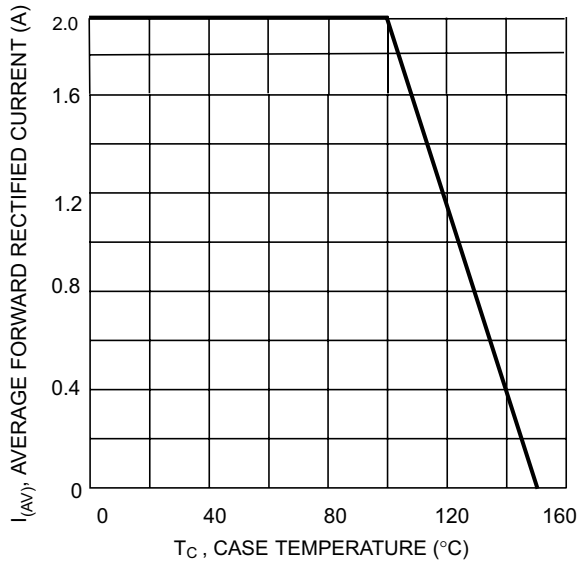


Fig. 2 Typical Forward Characteristics (per leg)

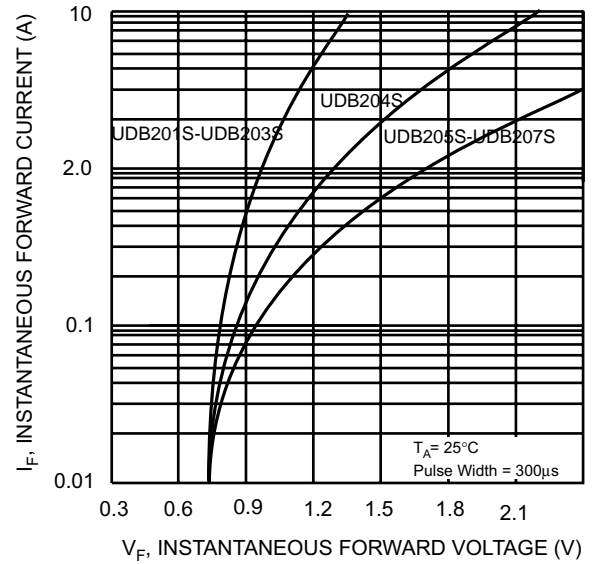


Fig. 3 Maximum Peak Forward Surge Current (per leg)

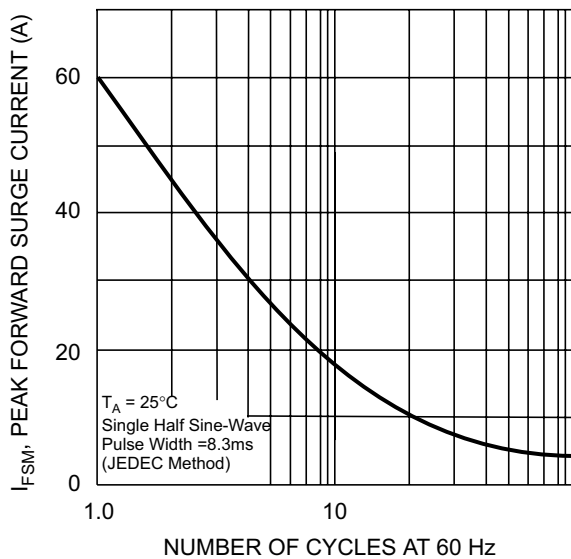


Fig. 4 Typical Reverse Characteristics (per element)

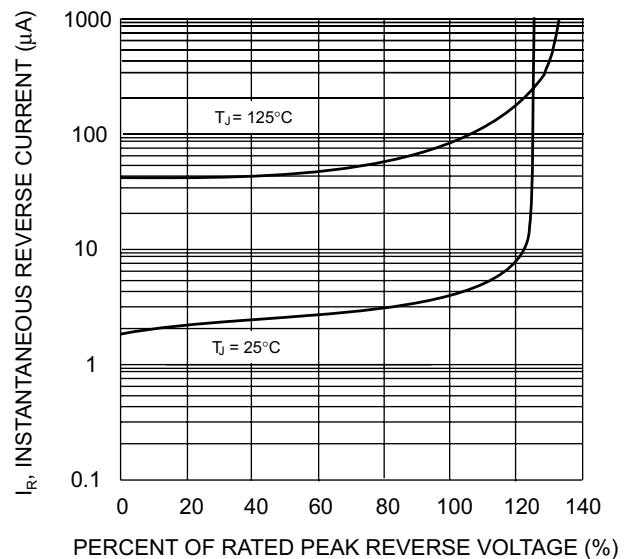
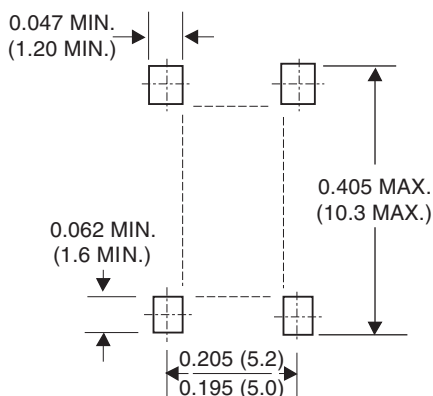


Fig. 5 Mounting Pad Layout



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