

4.0A GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage – 50 to 1000 V

Forward Current – 4.0A

Features

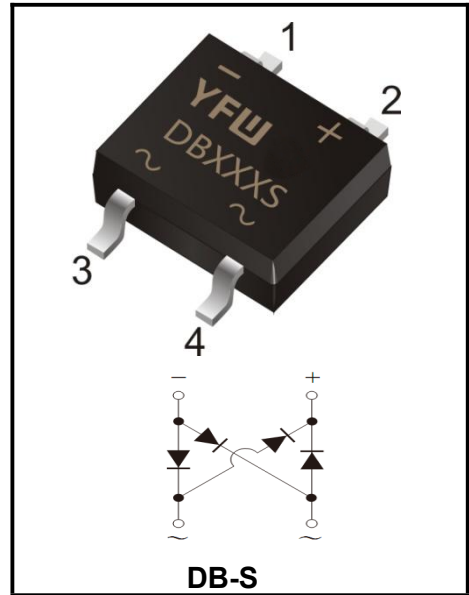
- ♦The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ♦Idea for printed circuit board
- ♦Glass passivated junction chip
- ♦Low reverse leakage
- ♦High forward surge current capability
- ♦High temperature soldering guaranteed 260°C/10 seconds at terminals

Mechanical Data

- ♦Case:Molded plastic body
- ♦Terminals :Solder plated, solderable per MIL-STD-750,Method 2026
- ♦Polarity :Polarity symbol marking on body
- ♦Mounting Position:Any
- ♦Weight : 0.0078 ounce, 0.22 grams

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.



Parameter	Symbols	DB401S	DB402S	DB403S	DB404S	DB405S	DB406S	DB407S	Units
Maximum Repetitive 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 rectified current at $T_L=100^{\circ}C$	$I_{(AV)}$	4.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	90							A
Rating for fusing ($t=8.3ms$, $T_a=25^{\circ}C$)	I^2t	33.6							A ² s
Maximum instantaneous forward voltage at 4.0A	V_F	1.1							V
Maximum DC Reverse Current @ $T_A=25^{\circ}C$ at Rated DC Blocking Voltage @ $T_A=125^{\circ}C$	I_R	2.0 200							μA
Typical Junction Capacitance (Note1)	C_j	38							pF
Typical Thermal Resistance	$R_{\theta JA}$	68							$^{\circ}C/W$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							$^{\circ}C$

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

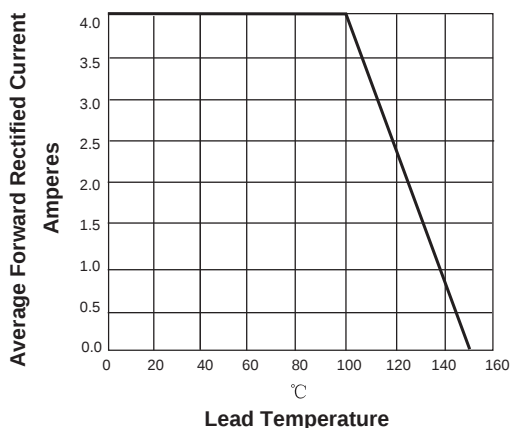


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

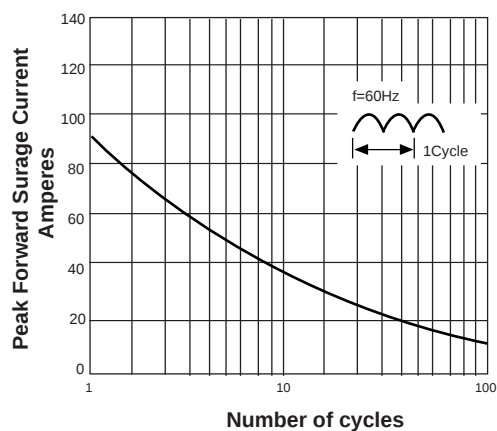


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

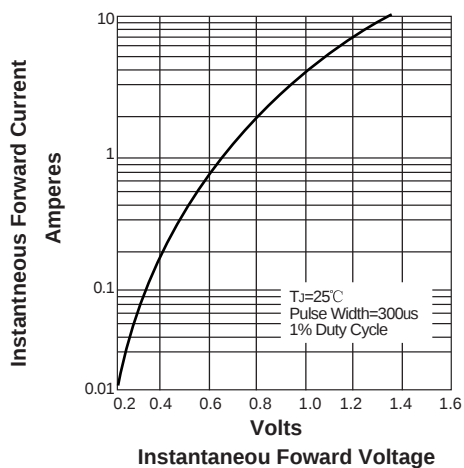
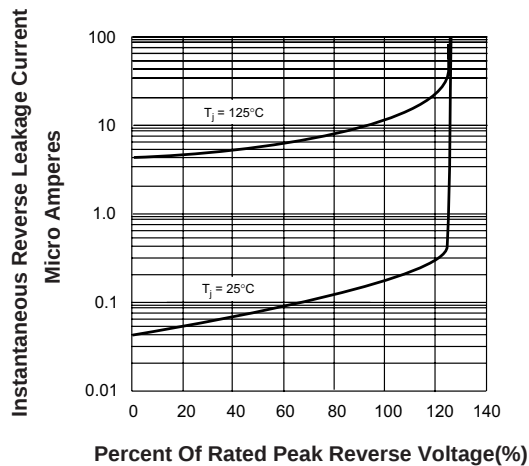
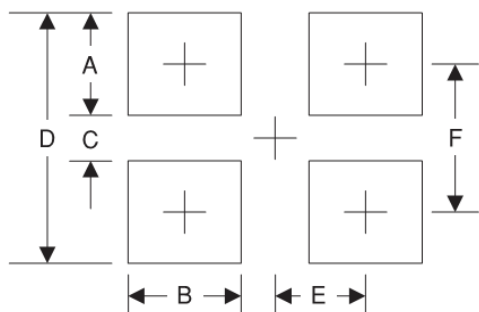


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



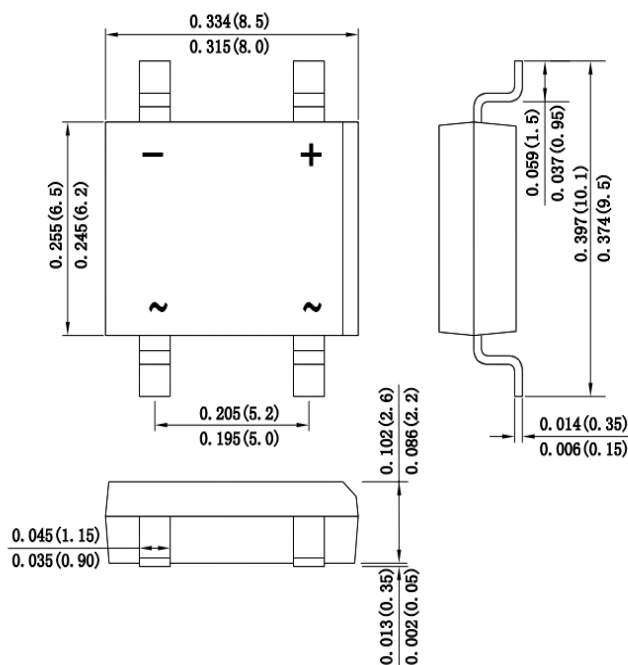
Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	2.3	0.091
B	1.3	0.051
C	6.90	0.272
D	11.5	0.453
E	2.6	0.102
F	9.20	0.362

Package Outline

DB-S



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DB-S	Tape/Reel, 13" reel	1500	EIA-481-1