KDB32S THRU KDB325S

SINGLE PHASE 3.0AMP SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER

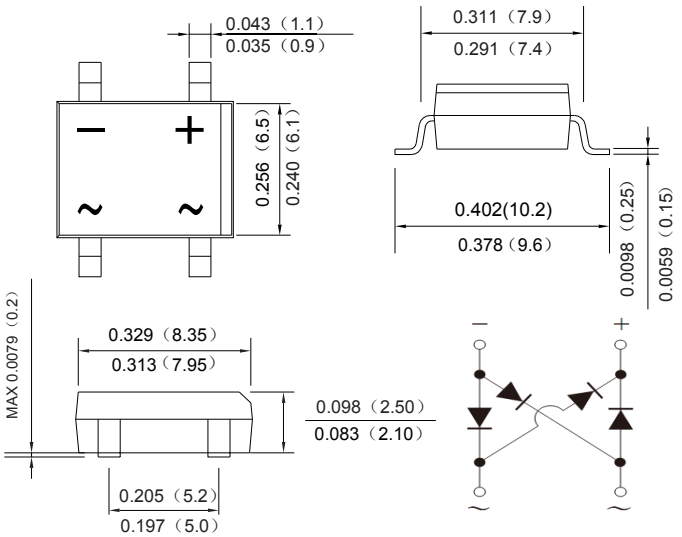
Features

- High current capacity,low V_F
- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability Classification Rating 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

DB-S



Dimensions in inches and （millimeters）

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	KDB 32S	KDB 33S	KDB 34S	KDB 345S	KDB 35S	KDB 36S	KDB 38S	KDB 310S	KDB 315S	KDB 320S	KDB 325S	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	20	30	40	45	50	60	80	100	150	200	250	V
RMS Reverse Voltage	V_{RMS}	14	21	28	31	35	42	56	70	105	140	175	V
Average Rectified Output Current (Note 1)@T_C=100℃	IF(AV)	3.0											A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80											A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	26.56											A^2s
Forward Voltage per element @IF=3.0A	V_{FM}	0.55				0.7		0.85		0.9		0.92	V
Peak Reverse Current @T_A=25℃ At Rated DC Blocking Voltage @T_A=100℃	I_R	0.1 10						0.05 5					mA
Typical Junction Capacitance per leg (Note 2)	C_J	28											pF
Typical Thermal Resistance per leg	$R_{\theta JA}$ $R_{\theta JL}$	75 20											℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150											℃

Note:1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.
2.Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Fig. 1 Output Current Derating Curve

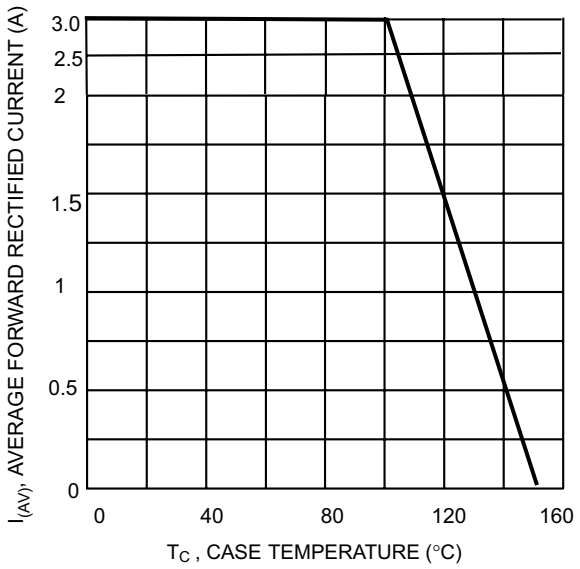


Fig. 2 Typical Forward Characteristics (per leg)

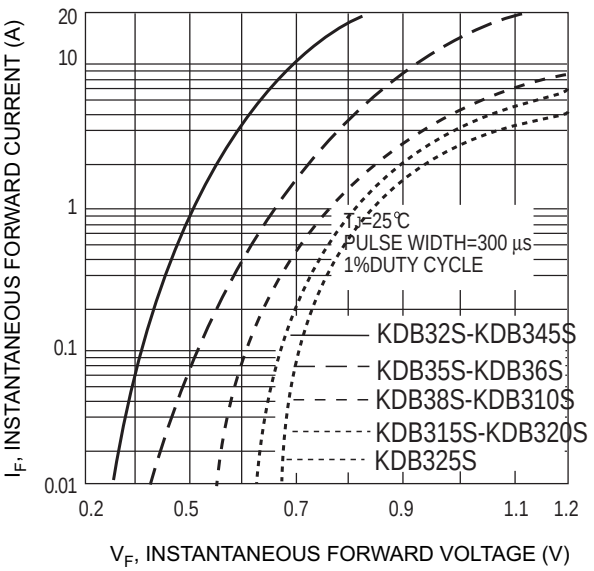


Fig. 3 Maximum Peak Forward Surge Current (per leg)

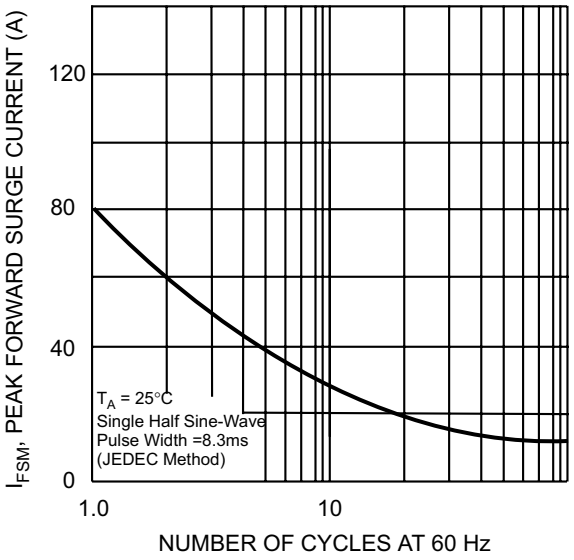


Fig. 4 Typical Reverse Characteristics (per element)

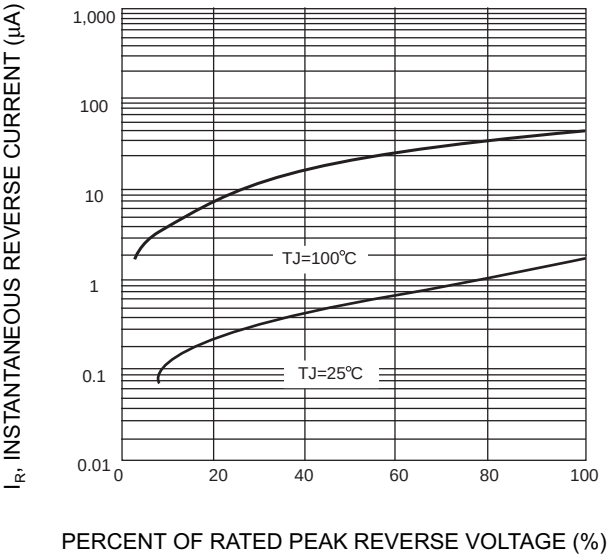
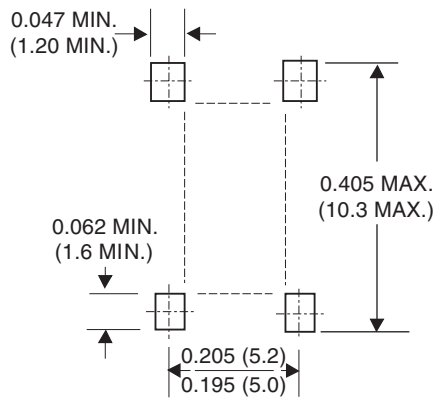


Fig. 5 **Mounting Pad Layout**



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