

KDB22S THRU KDB225S

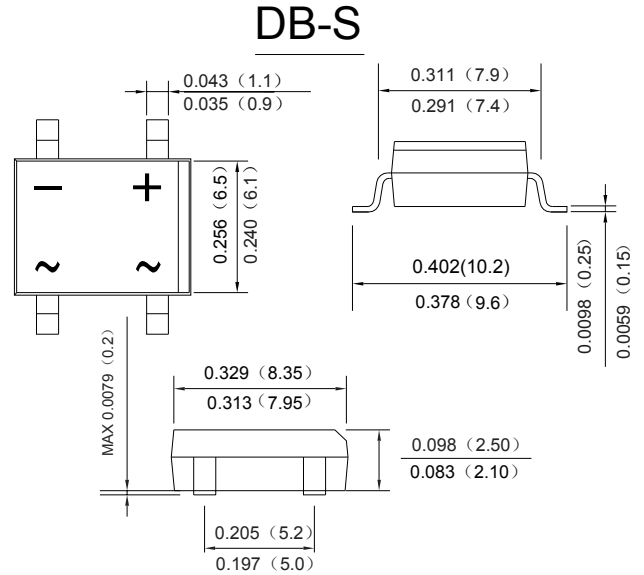
SINGLE PHASE 2.0AMP SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER

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



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	KDB 22S	KDB 23S	KDB 24S	KDB 245S	KDB 25S	KDB 26S	KDB 28S	KDB 210S	KDB 215S	KDB 220S	KDB 225S	UNITS	
Peak Repetitive Reverse Voltage	V_{RRM}												V	
Working Peak Reverse Voltage	V_{RWM}	20	30	40	45	50	60	80	100	150	200	250		
DC Blocking Voltage	V_{DC}													
RMS Reverse Voltage	V_{RMS}	14	21	28	31	35	42	56	70	105	140	175	V	
Average Rectified Output Current (Note 1) @ $T_A=90^\circ\text{C}$	I_o	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	
Forward Voltage per element @ $I_F=2.0\text{A}$	V_{FM}	0.55			0.7		0.85		0.9		0.92		V	
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	0.1						0.05						mA
		10						5						
Typical Junction Capacitance per leg (Note 2)	C_J	28											pF	
Typical Thermal Resistance per leg	$R_{\theta JA}$	75											°C/W	
	$R_{\theta JL}$	20												
Operating and Storage Temperature Range	T_J, T_{STG}	-55to+150											°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.

Fig. 1 Output Current Derating Curve

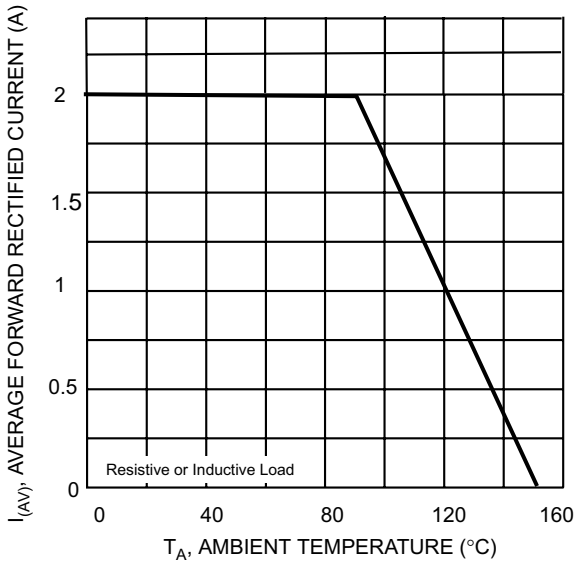


Fig. 2 Typical Forward Characteristics (per leg)

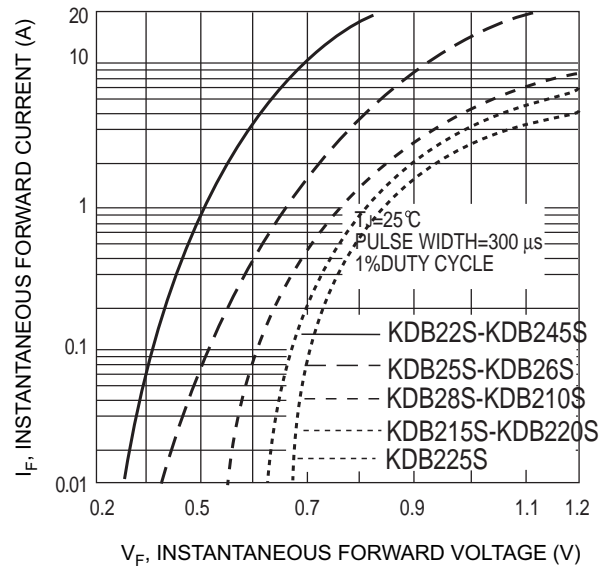


Fig. 3 Maximum Peak Forward Surge Current (per leg)

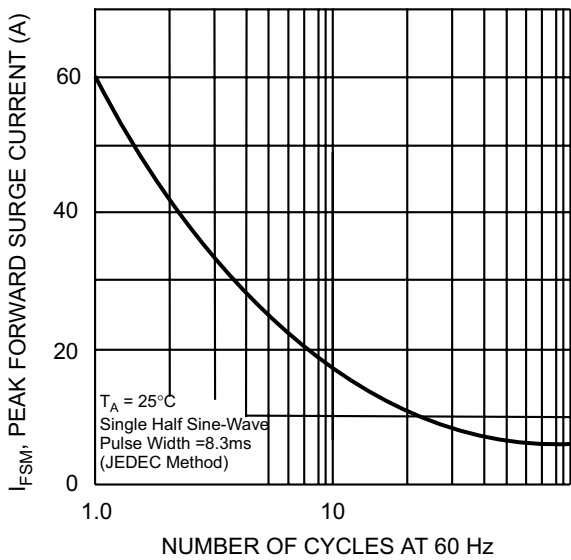


Fig. 4 Typical Reverse Characteristics (per element)

