

# KABF12 THRU KABF125

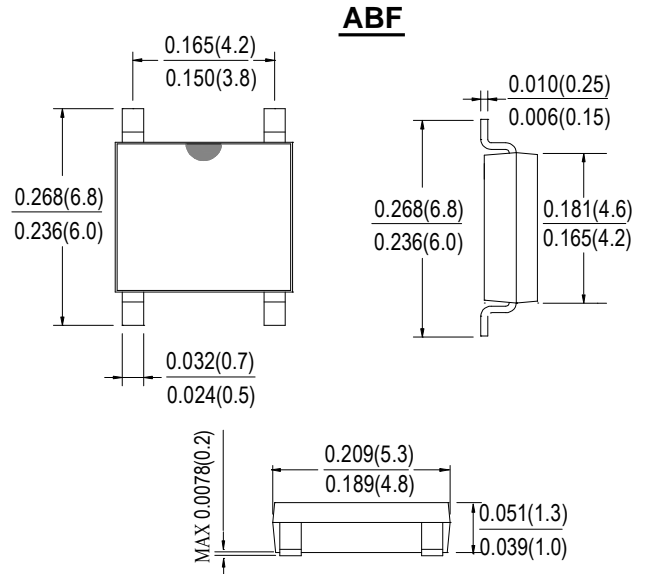
SINGLE PHASE 2.0 AMP SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER

## Features

- Schottky Brrier Chip
- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 50A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

## Mechanical Data

- Case: SOPA-4, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number



Dimensions in inches and (millimeters)

## 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	KABF 12	KABF 13	KABF 14	KABF 145	KABF 15	KABF 16	KABF 18	KABF 110	KABF 115	KABF 120	KABF 125	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	135	140	175	V	
Average Rectified Output Current @ $T_A=90^\circ\text{C}$	$I_o$	1.0											A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30											A	
Forward Voltage per element @ $I_F=2.0\text{A}$	$V_{FM}$	0.5			0.7			0.85		0.90		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 Thermal Resistance per leg (Note 1)	$R_{\theta JA}$	50											°C/W	
	$R_{\theta JL}$	10												
Operating junction temperature range	$T_J$	-55to+150											°C	
Operating and Storage Temperature Range	$T_{STG}$	-55to+150											°C	

Note:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Fig. 1 Output Current Derating Curve

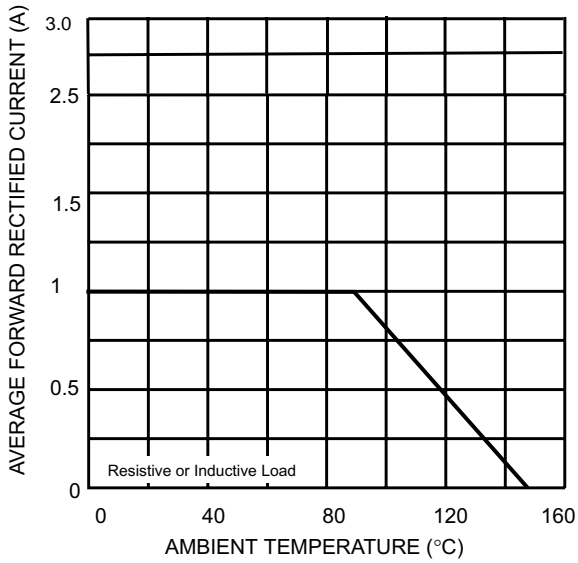


Fig. 2 Typical Forward Characteristics (per leg)

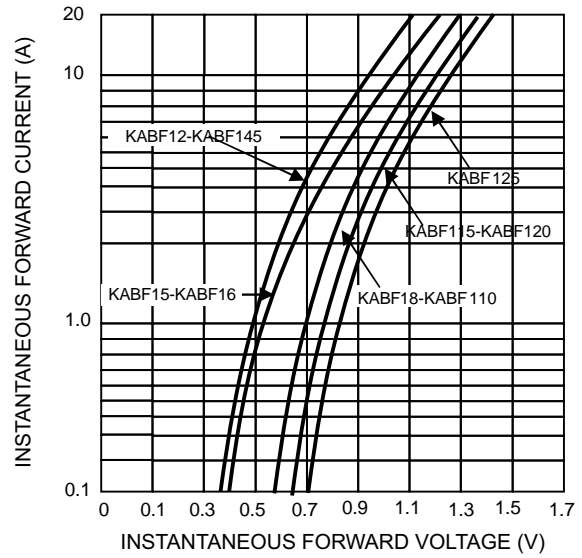


Fig. 3 Maximum Peak Forward Surge Current (per leg)

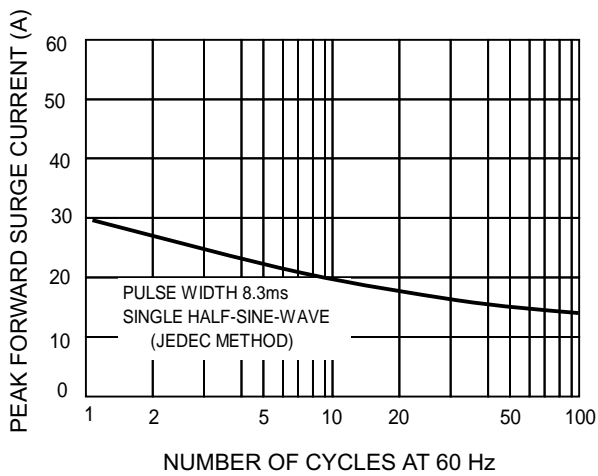


Fig. 4 Typical Reverse Characteristics (per element)

