



*DC COMPONENTS CO., LTD.*

RECTIFIER SPECIALISTS

ABK12F  
THRU  
ABK120F

**TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER**

**VOLTAGE RANGE - 20 to 200 Volts**

**CURRENT - 1.0 Ampere**

**FEATURES**

- \*High surge current capability
- \* Ideal for printed circuit board

**MECHANICAL DATA**

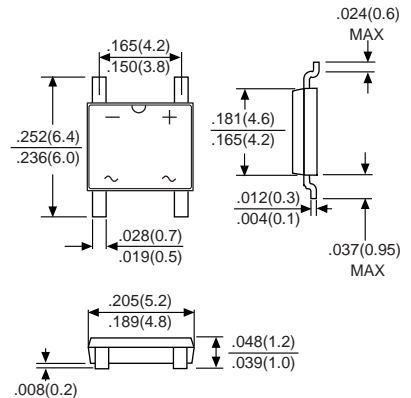
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Symbols molded or marked on body
- \* Mounting position: Any
- \* Weight: 0.082 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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



ABF



Dimensions in inches and (millimeters)

	SYMBOL	ABK12F	ABK14F	ABK16F	ABK18F	ABK110F	ABK115F	ABK120F	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	40	60	80	100	150	200	Volts
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	14	28	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	40	60	80	100	150	200	Volts
Maximum Average Forward Output Current at TA=75°C (Note 1)	I <sub>O</sub>	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	40			30				Amps
Maximum DC Forward Voltage Drop per Bridge Element at 1.0A DC	V <sub>F</sub>	0.55		0.70	0.85		0.90		Volts
Maximum Reverse Current at rated DC Blocking Voltage per element	I <sub>R</sub>	@ TA = 25°C			0.2		0.1		mAmps
		@ TA = 125°C			10				
Typical Junction Capacitance ( Note 2)	C <sub>J</sub>	110				pF			
Typical Thermal Resistance (Note 3)	R <sub>θJA</sub>	95				°C/W			
Operating and Storage Temperature Range	T <sub>J,TSTG</sub>	-50 to + 150				°C			

NOTES: 1. Mounted on P.C. board with 4x(5x5mm<sup>2</sup>) copper pad.  
2. Measured at 1.0 MHZ and applied reverse voltage of 4.0V DC.  
3. Thermal resistance junction to ambient.

# RATING AND CHARACTERISTIC CURVES ( ABK12F THRU ABK120F )

FIG. 1  
MAXIMUM NON-REPETITIVE SURGE CURRENT

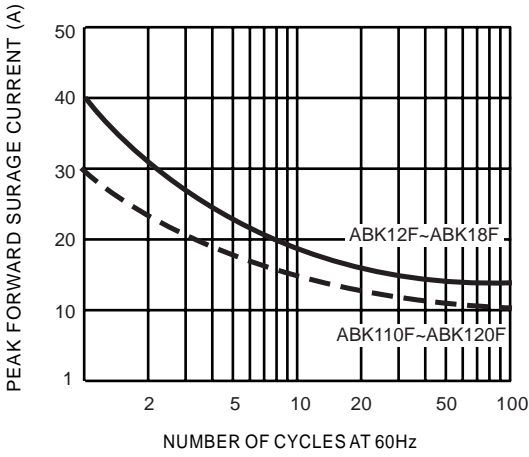


FIG. 2  
DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

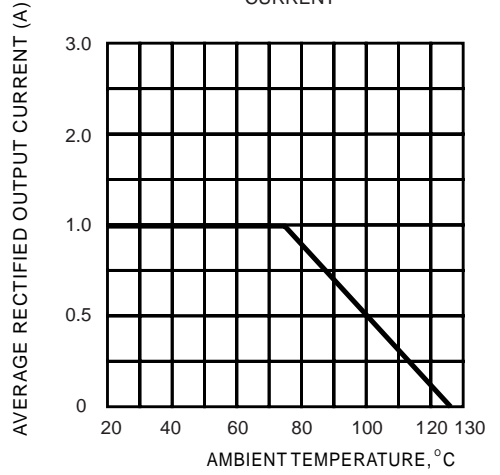


FIG. 3  
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

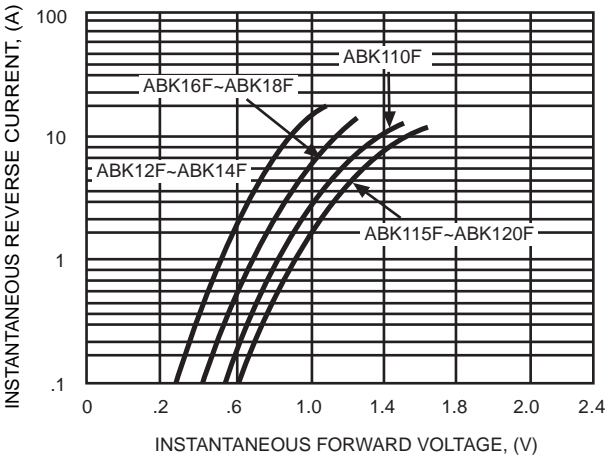
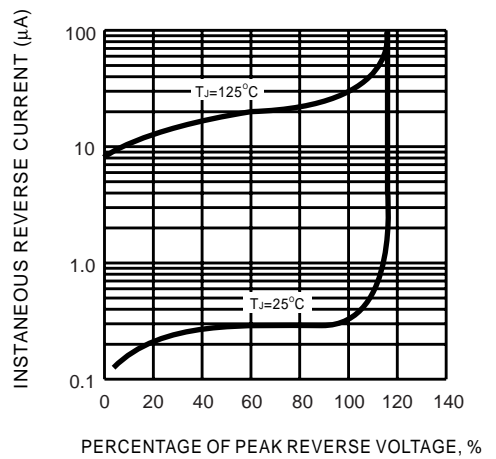


FIG. 4  
TYPICAL REVERSE CHARACTERISTICS



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