



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

ABK22F
THRU
ABK220F

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER

VOLTAGE RANGE - 20 to 200 Volts

CURRENT - 2.0 Amperes

FEATURES

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

MECHANICAL DATA

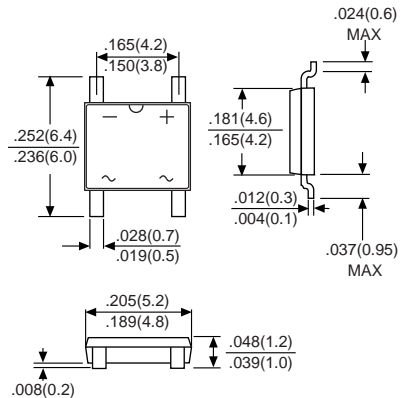
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 0.082 gram

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 | ABK22F | ABK24F | ABK26F | ABK28F | ABK210F | ABK215F | ABK220F | UNITS |
|---|---------------------|--------------|--------|--------|--------|--------------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 20 | 40 | 60 | 80 | 100 | 150 | 200 | Volts |
| Maximum RMS Bridge Input Voltage | V _{RMS} | 14 | 28 | 42 | 56 | 70 | 105 | 140 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 20 | 40 | 60 | 80 | 100 | 150 | 200 | Volts |
| Maximum Average Forward Output Current at TA=75°C (Note 1) | I _O | 2.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 40 | | | 30 | | | | Amps |
| Maximum DC Forward Voltage Drop per Bridge Element at 2.0A DC | V _F | 0.55 | | 0.70 | 0.85 | | 0.90 | | Volts |
| Maximum Reverse Current at rated DC Blocking Voltage per element | I _R | @ TA = 25°C | | | 0.3 | | 0.2 | | mAmps |
| | | @ TA = 125°C | | | 10 | | | | |
| Typical Junction Capacitance (Note 2) | C _J | | | | | 220 | | | pF |
| Typical Thermal Resistance (Note 3) | R _{θJA} | | | | | 75 | | | °C/W |
| Operating and Storage Temperature Range | T _{J,TSTG} | | | | | -50 to + 150 | | | °C |

NOTES: 1. Mounted on P.C. board with 4x(5x5mm²) 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 (ABK22F THRU ABK220F)

FIG. 1
MAXIMUM NON-REPETITIVE SURGE CURRENT

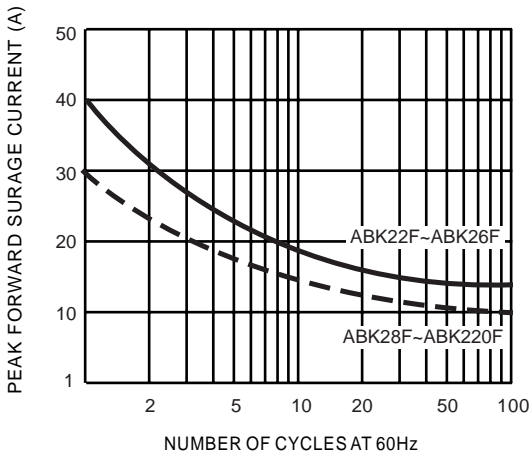


FIG. 2
DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

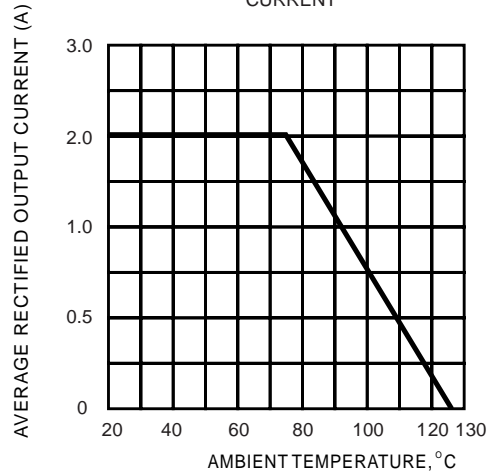


FIG. 3
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

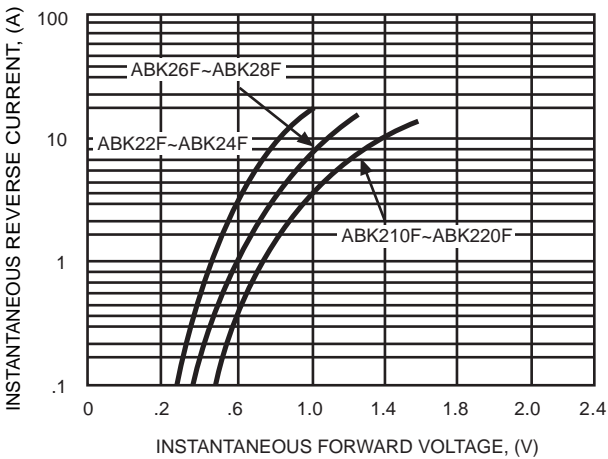
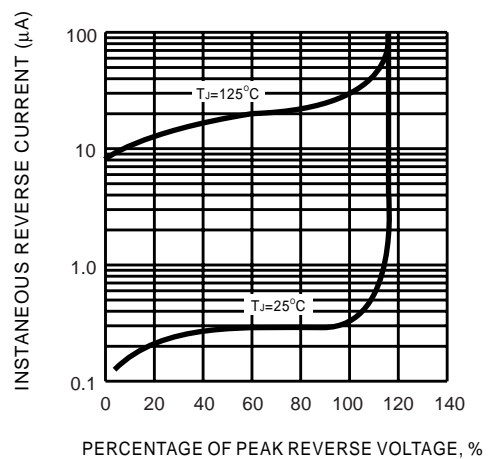


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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