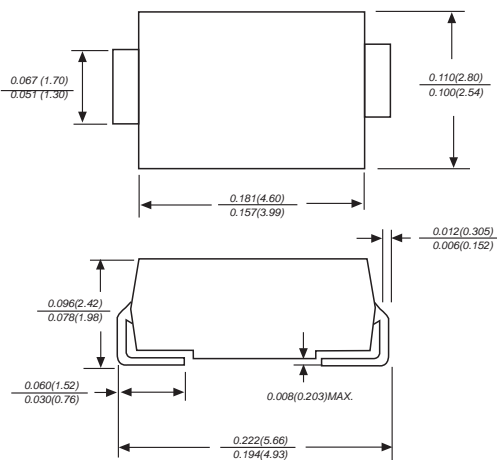


# B220A THRU B2100A

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 2.0 Amperes

### DO-214AC/SMA



Dimensions in inches and (millimeters)

### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

### MECHANICAL DATA

**Case:** JEDEC DO-214AC molded plastic body  
**Terminals:** leads solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.070 grams

### 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 current derate by 20%.

| YFU Catalog Number  | SYMBOLS         | B220A       | B230A | B240A | B250A | B260A | B280A       | B2100A | UNITS |
|---|-----------------|-------------|-------|-------|-------|-------|-------------|--------|-------|
| Maximum repetitive peak reverse voltage   | $V_{RRM}$       | 20          | 30    | 40    | 50    | 60    | 80          | 100    | VOLTS |
| Maximum RMS voltage   | $V_{RMS}$       | 14          | 21    | 28    | 35    | 42    | 56          | 70     | VOLTS |
| Maximum DC blocking voltage   | $V_{DC}$        | 20          | 30    | 40    | 50    | 60    | 80          | 100    | VOLTS |
| Maximum average forward rectified current at $T_L$ (see fig.1)  | $I_{(AV)}$      | 2.0         |       |       |       |       |             |        | Amps  |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed on rated load (JEDEC Method)             | $I_{FSM}$       | 50.0        |       |       |       |       |             |        | Amps  |
| Maximum instantaneous forward voltage at 2.0A   | $V_F$           | 0.55        |       | 0.70  |       | 0.85  |             | Volts  |       |
| Maximum DC reverse current<br>at rated DC blocking voltage<br>$T_A=25^\circ\text{C}$<br>$T_A=100^\circ\text{C}$ | $I_R$           | 0.5         |       |       |       |       | 5.0         |        | mA    |
|   |                 | 10.0        |       |       |       |       |             |        |       |
| Typical junction capacitance (NOTE 1)   | $C_J$           | 220         |       |       | 180   |       |             | pF     |       |
| Typical thermal resistance (NOTE 2)   | $R_{\theta JA}$ | 75.0        |       |       |       |       |             |        | °C/W  |
| Operating junction temperature range  | $T_J$           | -50 to +125 |       |       |       |       | -50 to +150 |        | °C    |
| Storage temperature range   | $T_{STG}$       | -50 to +150 |       |       |       |       |             |        | °C    |

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

## RATINGS AND CHARACTERISTIC CURVES B220A THRU B2100A

