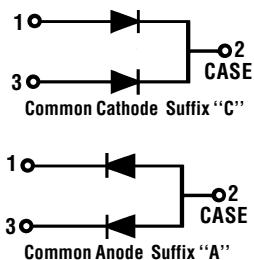
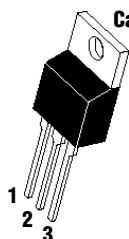


FBR3030~60 SERIES

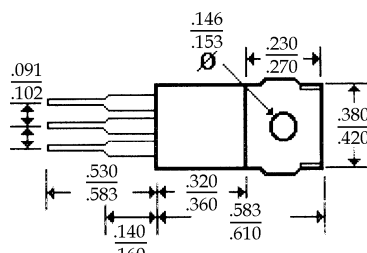
# 30 Amp SCHOTTKY BARRIER RECTIFIERS

## Description



## Mechanical Dimensions

JEDEC  
T0-220AB



(Dimensions in inches)

## Features

- HIGH CURRENT CAPABILITY WITH LOW  $V_f$
- HIGH SURGE VOLTAGE AND TRANSIENT PROTECTION
- HIGH EFFICIENCY w/LOW POWER LOSS
- MEETS UL SPECIFICATION 94V-0

Maximum Ratings And Electrical Characteristics (Ta=25 °C)

| Parameters                                                                         | Symbol | FBR30                           |    |    |      |    |    | Unit |
|------------------------------------------------------------------------------------|--------|---------------------------------|----|----|------|----|----|------|
|                                                                                    |        | 30                              | 35 | 40 | 45   | 50 | 60 |      |
| Average forward current, $I_o$ at $T_c = 104$<br>60Hz, Resistive or Inductive Load | IF     | 3.0 A                           |    |    |      |    |    |      |
| Peak Repetitive Reverse Voltage                                                    | VRRM   | 30                              | 35 | 40 | 45   | 50 | 60 | V    |
| Working Peak Reverse Voltage                                                       | V RWM  | 21                              | 24 | 28 | 32   | 35 | 42 | V    |
| DC Blocking Voltage                                                                | VDC    | 30                              | 35 | 45 | 45   | 50 | 60 | V    |
| Forward Voltage @ $I_F = 5A$                                                       | VF     | 0.55                            |    |    | 0.65 |    |    | V    |
| Non-Peak Forward Surge Current, @Rated<br>Load Conditions 8.3mS 1/2 Sine-Wave      | IFMS   | 250A                            |    |    |      |    |    |      |
| Repetitive Peak Reverse Surge Current                                              | IRSM   | 0.5A                            |    |    |      |    |    |      |
| Max. Reverse Current IR At Rated DC<br>Reverse Voltage. $T_c = 25/125$             | IR     | 1.0 mA<br>60mA                  |    |    |      |    |    |      |
| Typical thermal Resistance,                                                        | R JC   | 2 °C/W                          |    |    |      |    |    |      |
| Operating and Storage Temperature Range                                            | To/Ts  | -65 to +150 °C / -65 to +150 °C |    |    |      |    |    |      |

**S30C50 , S30C60**

FBR3030~60 SERIES

FIG-1 FORWARD CURRENT DERATING CURVE

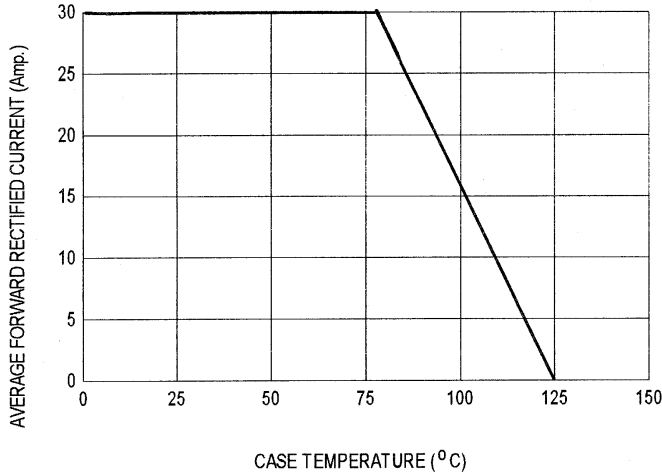


FIG-2 TYPICAL FORWARD CHARACTERISTICS

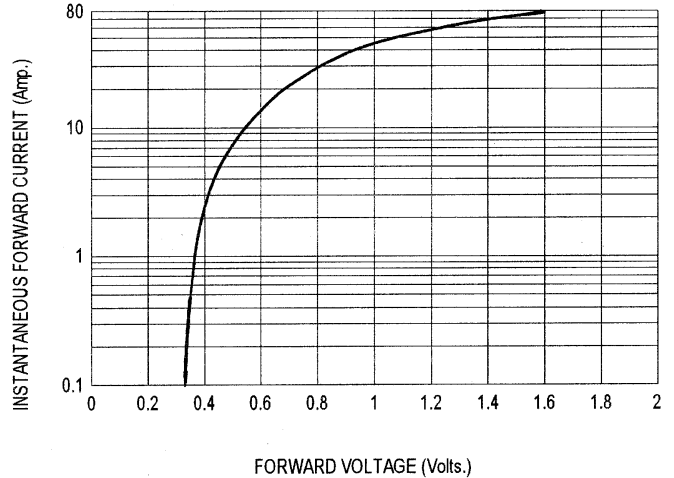


FIG-3 TYPICAL REVERSE CHARACTERISTICS

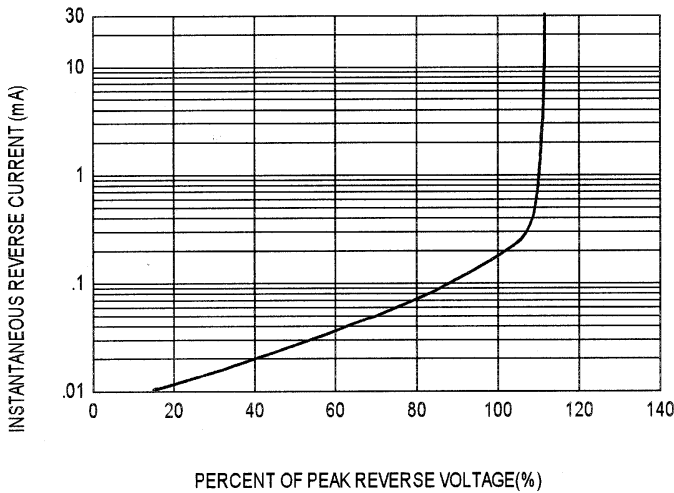


FIG-4 TYPICAL JUNCTION CAPACITANCE

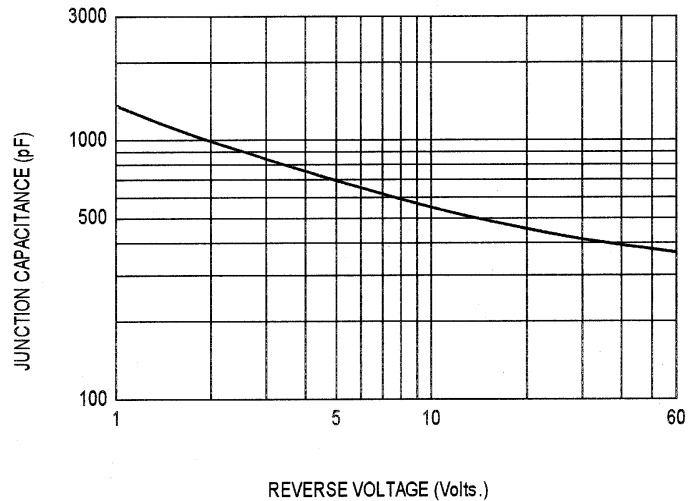


FIG-5 PEAK FORWARD SURGE CURRENT

