

## 30.0A 100V Schottky Barrier Diode

### Product Character

- Multilayer Metal -Silicon Potential Structure.
- Low Leakage Current.
- High Current Capability, High Efficiency.
- High Junction Temperature Capability.
- RoHs Product.

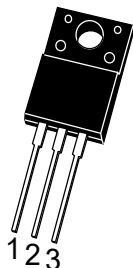
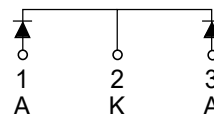
### Primary Use

- Low Voltage High Frequency Switching Power Supply.
- Low Voltage High Frequency Invers Circuit.
- Low Voltage Continued Circuit and Protection Circuit.

### Summarize

- EBR30L100FCT Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

### Equivalent Circuit



Package: ITO-220AB  
EBR30L100FCT  
EBR30L100FCT-HF  
HF=Halogen Free

### Absolute Maximum Ratings

| Item                                                                                  |                   | Symbol          | Data    | Unit |
|---------------------------------------------------------------------------------------|-------------------|-----------------|---------|------|
| Maximal Inverted Repetitive Peak Voltage                                              |                   | $V_{RRM}$       | 100     | V    |
| Average Rectified Forward Current(Rated VR-20Khz Square Wave)-50% duty cycle          | Per Device        | $I_{FAV}$       | 30      | A    |
|                                                                                       | Per Diode         |                 | 15      |      |
| Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method) | Per Diode         | $I_{FSM}$       | 250     | A    |
| Operating Junction Temperature                                                        |                   | $T_J$           | -40~150 | °C   |
| Storage Temperature                                                                   |                   | $T_{STG}$       | -40~150 | °C   |
| Typical Thermal Resistance(per leg)                                                   | Package=ITO-220AB | $R_{\theta JC}$ | 4       | °C/W |

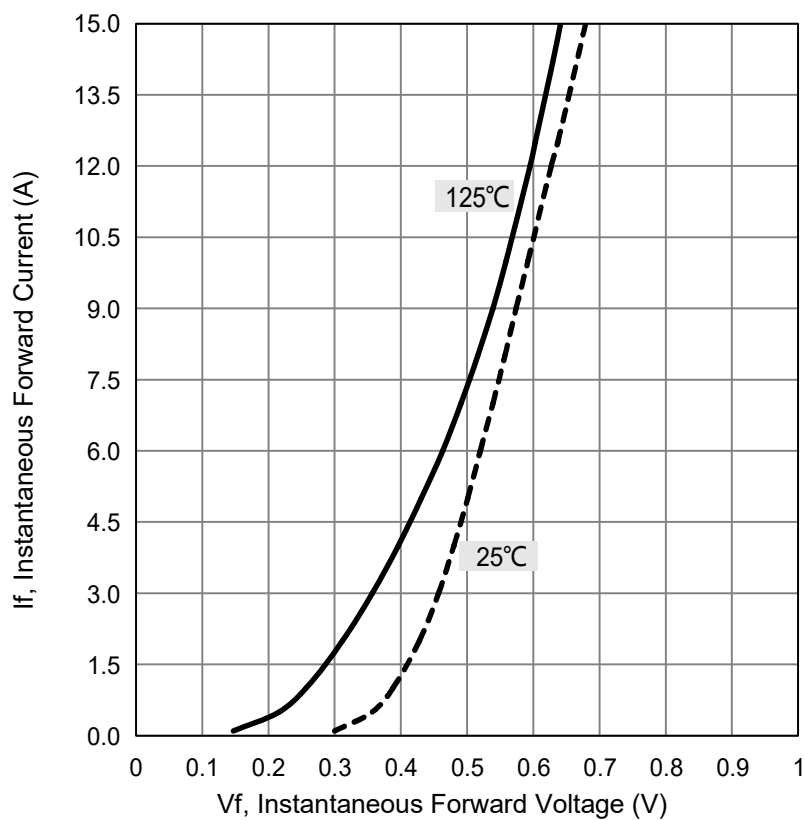
### Electricity Characteristics

| Item  | Test Condition              |                     | Value(min) | Value(typ) | Value(max) | Unit |
|-------|-----------------------------|---------------------|------------|------------|------------|------|
| $V_B$ | $T_J = 25^{\circ}\text{C}$  | $I_R = 1\text{mA}$  | 100        | —          | —          | V    |
| $I_R$ | $T_J = 25^{\circ}\text{C}$  | $V_R = 100\text{V}$ | —          | —          | 0.03       | mA   |
|       | $T_J = 125^{\circ}\text{C}$ | $V_R = 100\text{V}$ | —          | —          | 15.00      | mA   |
| $V_F$ | $T_J = 25^{\circ}\text{C}$  | $I_F = 15\text{A}$  | —          | 0.68       | 0.75       | V    |
|       | $T_J = 125^{\circ}\text{C}$ | $I_F = 15\text{A}$  | —          | —          | 0.7        | V    |

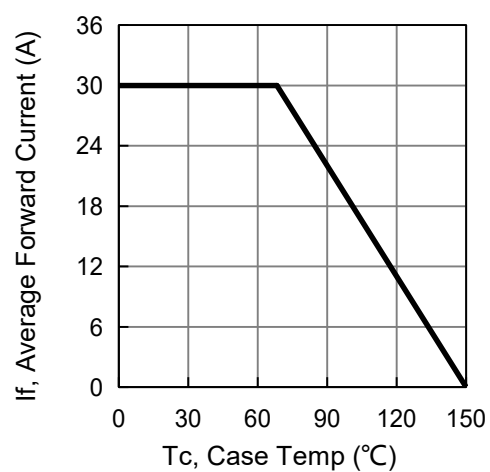


## Characteristic Curves

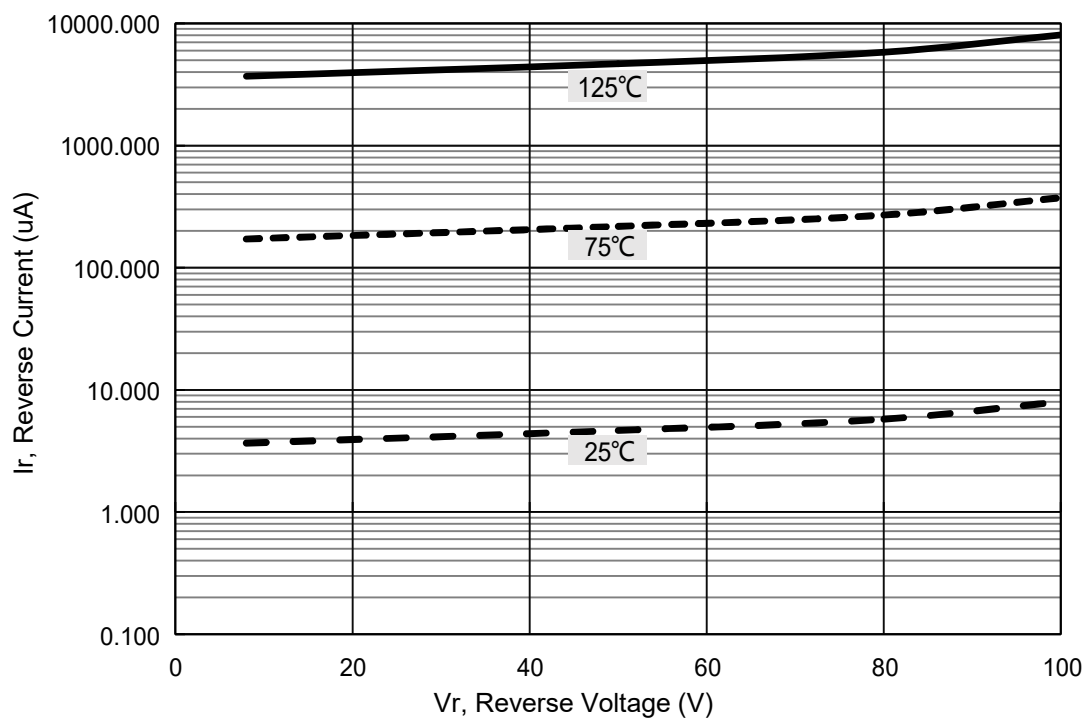
The forward voltage and forward current curve



Current derating curve, per element

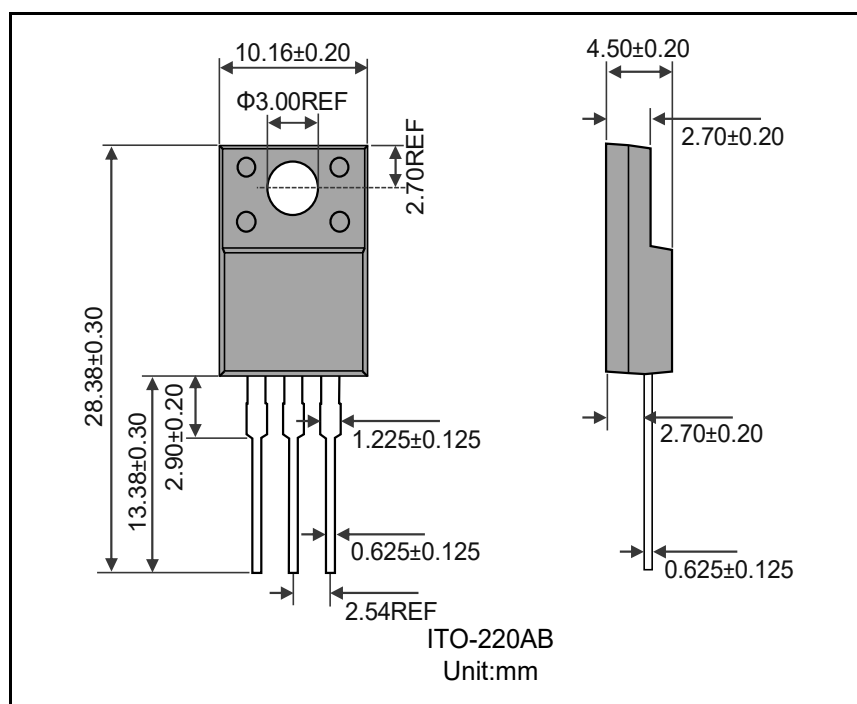


The reverse leak current and the reverse voltage (single-device) curve.

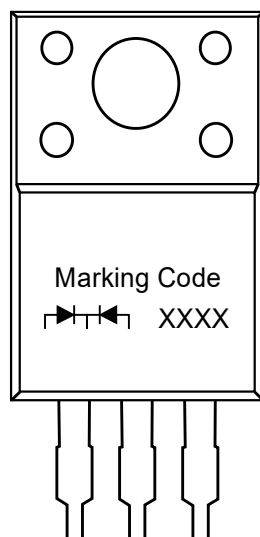




## Package Outline Dimensions



## Marking Information



“Marking Code”= The Following

“XXXX”= Date Code Marking

| Marking Code | Part Number     |
|--------------|-----------------|
| EBR30L100F   | EBR30L100FCT    |
|              | EBR30L100FCT-HF |

## Packing Information

| Packaging | Part Number | Quantity(pcs) | Size(mm)       |
|-----------|-------------|---------------|----------------|
| Tube      | Tube        | 50            | L534×W33×H7    |
|           | Inner Box   | 1000          | L560×W150×H40  |
|           | Outer Box   | 5000          | L570×W235×H175 |