

**Surface Mount Schottky Rectifier**

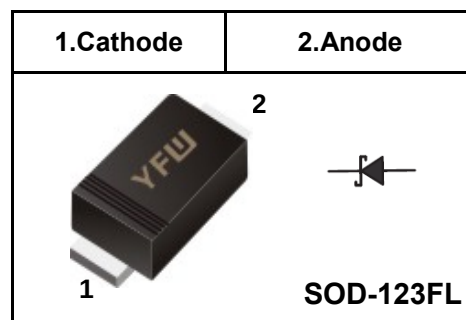
**Reverse Voltage - 20V**

**Forward Current - 1 A**

## FEATURES

- ◆Low power loss, high efficiency
- ◆High forward surge current capability
- ◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-0

## Pinning



**Absolute Maximum Ratings Ta = 25°C**

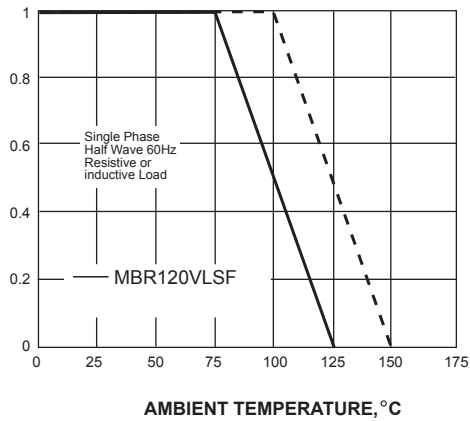
| Parameter                               |         | Symbol    | MBR120VLSF | Units |
|-----------------------------------------|---------|-----------|------------|-------|
| Maximum Repetitive Peak Reverse Voltage |         | $V_{RRM}$ | 20         | V     |
| Maximum RMS voltage                     |         | $V_{RMS}$ | 14         |       |
| Maximum DC Blocking Voltage             |         | $V_{DC}$  | 20         |       |
| Forward Voltage @ IF=1A                 |         | $V_F$     | 0.55       |       |
| Averaged Forward Current.Ta=75℃         |         | $I_{FAV}$ | 1          | A     |
| Peak Forward Surge Current Ta=25℃       |         | $I_{FSM}$ | 25         |       |
| Maximum DC Reverse Current              | Ta=25℃  | $I_R$     | 1          | mA    |
|                                         | Ta=100℃ |           | 10         |       |
| Typical Junction Capacitance (Note.1)   |         | $C_j$     | 110        | pF    |
| Junction Temperature                    |         | $T_j$     | -65 ~ +125 | ℃     |
| Storage Temperature                     |         | $T_{stg}$ | -65 ~ +125 |       |

Note.1:Measured at 1MHz and applied reverse voltage of 4.0V D.C.

■ Typical Characteristics

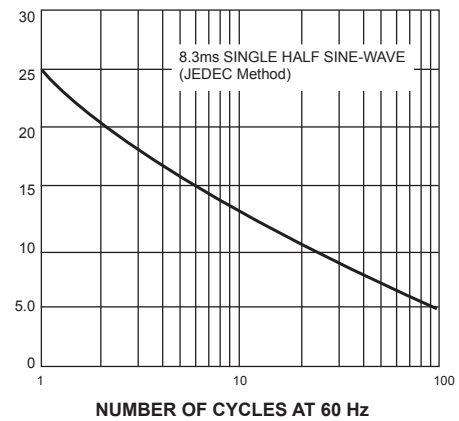
AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



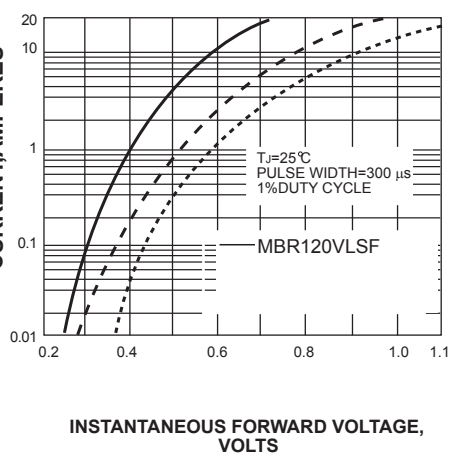
PEAK FORWARD SURGE CURRENT,  
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



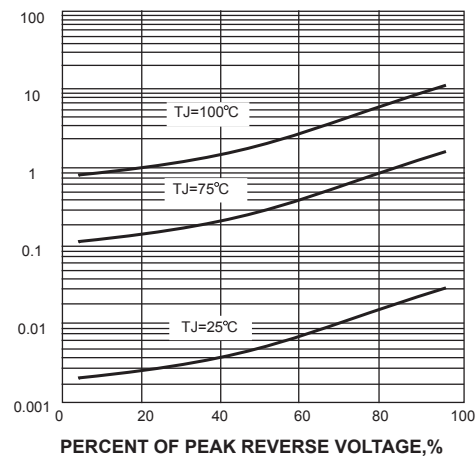
INSTANTANEOUS FORWARD  
CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



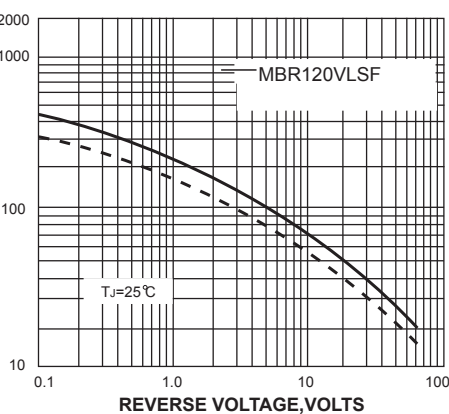
INSTANTANEOUS REVERSE CURRENT,  
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

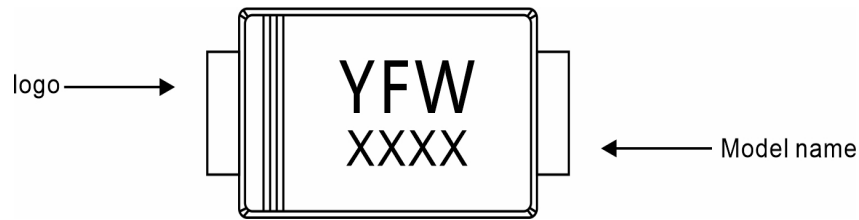


JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



**Marking Diagram**



**Ordering information**

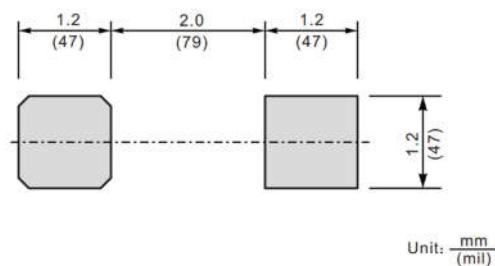
| Package   | Packing Description | Packing Quantity               |
|-----------|---------------------|--------------------------------|
| SOD-123FL | Tape/Reel, 13"reel  | 10000PCS/Reel 100000PCS/Carton |
|           | Tape/Reel, 7"reel   | 3000PCS/Reel 120000PCS/Carton  |

**Package Dimensions**

**SOD-123FL**

| Dim. | Millimeter(mm) |      | mil  |      |
|------|----------------|------|------|------|
|      | Min.           | Max. | Min. | Max. |
| A    | 0.9            | 1.3  | 35   | 43   |
| C    | 0.12           | 0.20 | 4.7  | 7.9  |
| D    | 2.6            | 2.9  | 102  | 114  |
| E    | 1.7            | 1.9  | 67   | 75   |
| e    | 0.8            | 1.1  | 31   | 43   |
| g    | 0.7            | 0.9  | 28   | 35   |
| HE   | 3.5            | 3.8  | 138  | 150  |
| ∠    | 7°             |      |      |      |

**The recommended mounting pad size**



## Disclaimer

The information presented in this document is for reference only. GuangDong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.