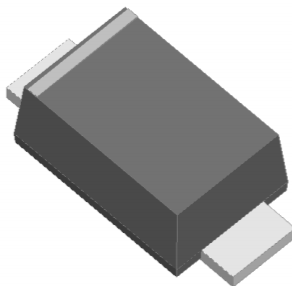


### Features

LVF Schottky chip  
Low VF, Low power losses, high efficiency  
Ideal for surface mounted applications  
Plastic Case Material has UL Flammability

### Mechanical Data

Package: SMAF  
Terminals: Tin Plated leads, solderable per  
Mil-STD-750 Method 2026  
Polarity: As marked  
Molding compound meets UL 94 V-0 flammability rating,  
ROHS-compliant



SMAF



### Maximum Ratings (Ta=25°C Unless otherwise specified)

| Type Number                                                                                                     | SYMBOL      | MBR5H60AFC-TP | Unit             |
|-----------------------------------------------------------------------------------------------------------------|-------------|---------------|------------------|
| Maximum Recurrent Peak Reverse Voltage                                                                          | $V_{RRM}$   | 60            | V                |
| Maximum RMS Voltage                                                                                             | $V_{RMS}$   | 42            | V                |
| Maximum DC Blocking Voltage                                                                                     | $V_{DC}$    | 60            | V                |
| Maximum Average Forward Rectified Current                                                                       | $I_{O(AV)}$ | 5.0           | A                |
| Peak Forward Surge Current<br>8.3ms Single half-sine-wave superimposed on rated<br>load (JEDEC Method) on rated | IFSM        | 100.0         | A                |
| Forward Surge Current (Non-repetitive)<br>@1ms, square wave, 1 cycle, Tj=25°C                                   |             | 200.0         | A                |
| Current squared time<br>@1ms≤t≤8.3ms Tj=25°C, Rating of per diode                                               | $I^2t$      | 41.5          | A <sup>2</sup> S |
| Maximum Forward Voltage at 5.0A DC                                                                              | $V_{FM}$    | 0.55          | V                |
| Maximum Reverse Current TA = 25°C                                                                               | IR          | 0.2           | mA               |
| at Rated DC Blocking Voltage TA = 80°C                                                                          |             | 50.0          |                  |
| Typical Thermal Resistance Between junction and<br>ambient                                                      | $R_{QJA}$   | 65.0          | °C/W             |
| Operating Junction Temperature Range                                                                            | $T_J$       | —55to+150     | °C               |
| Storage Temperature Range                                                                                       | $T_{STG}$   | —55to+150     | °C               |

FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

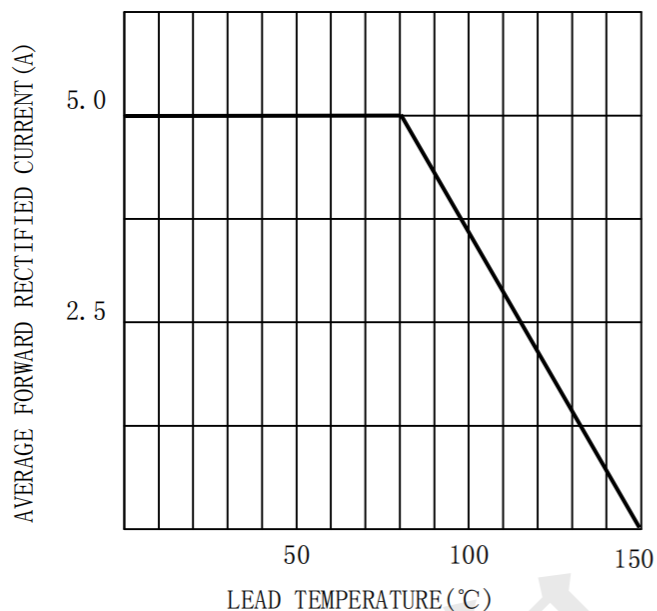


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

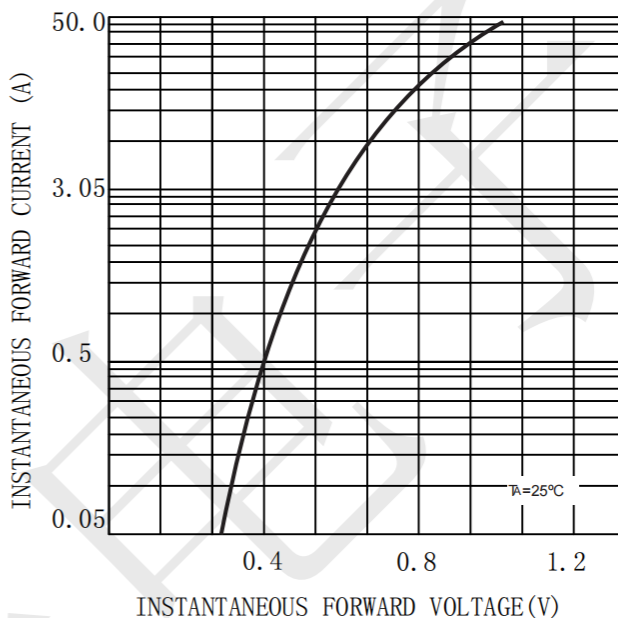


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

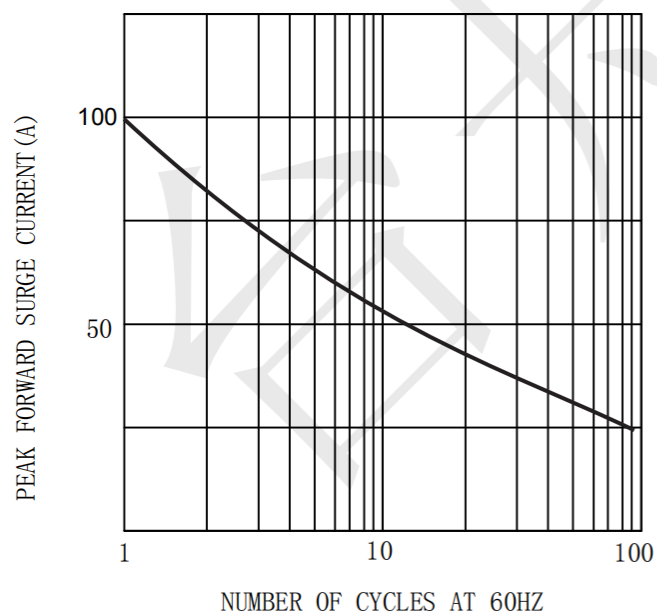
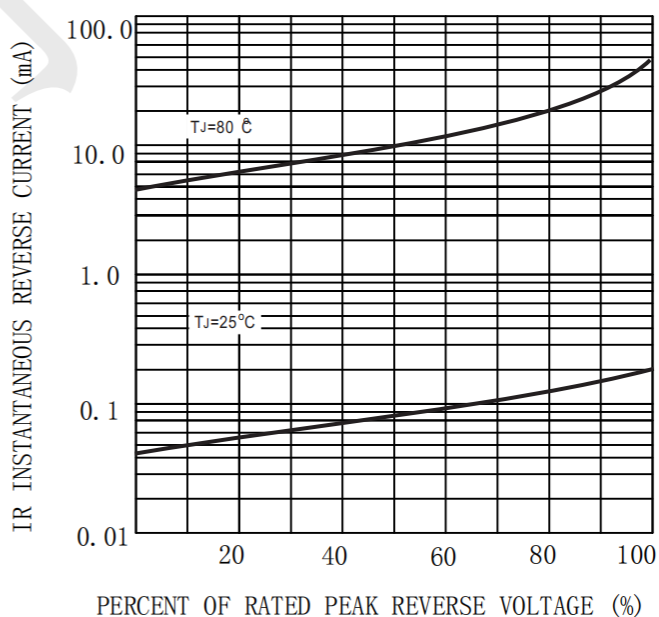
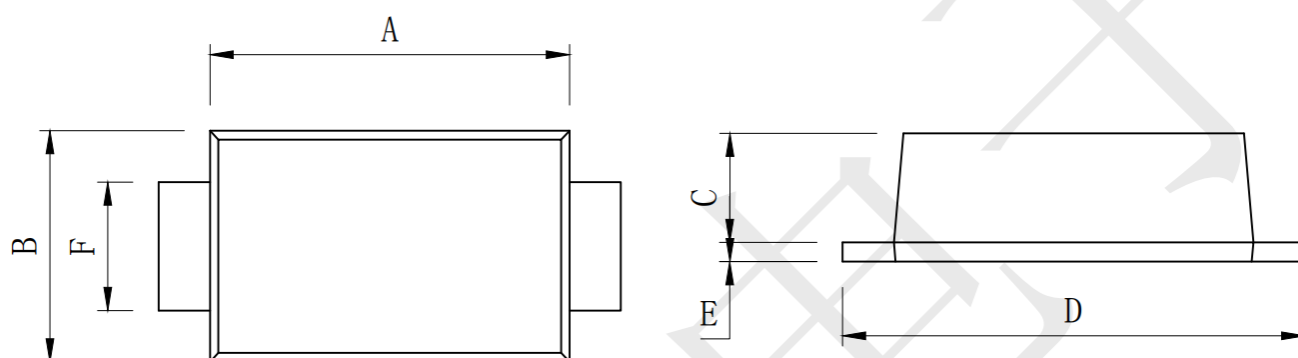


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)



## Outline Dimensions

### SMAF



| SMAF |         |      |     |     |
|------|---------|------|-----|-----|
| DIM  | INC HES |      | MM  |     |
|      | MIN     | MAX  | MIN | MAX |
| A    | 0.13    | 0.15 | 3.2 | 3.8 |
| B    | 0.09    | 0.11 | 2.3 | 2.7 |
| C    | 0.03    | 0.05 | 0.8 | 1.2 |
| D    | 0.16    | 0.20 | 4   | 5   |
| E    | /       | 0.01 | /   | 0.3 |
| F    | 0.04    | 0.08 | 1   | 2   |