

### SWITCHING TYPE POWER SUPPLY APPLICATIONS.

#### FEATURES

- Low Profile Surface Mount Package.
- Low Power Loss, High Efficiency.
- For Use in Low Voltage, High Frequency inverters, Free Wheeling, and Polarity Protection Applications.
- Suffix U : Qualified to AEC-Q101.  
ex) SMAB36-RTK/HU

#### APPLICATION

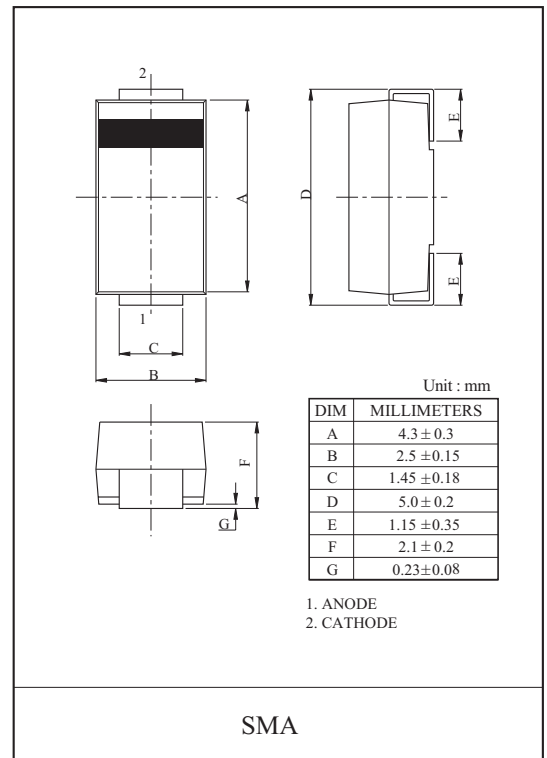
- Switching Power Supply.
- DC/DC Converter.
- Home Appliances, Office Equipment.
- Telecommunication.

#### MAXIMUM RATING (Ta=25 °C)

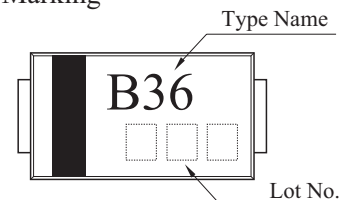
| CHARACTERISTIC   | SYMBOL    | RATING  | UNIT |
|--|-----------|---------|------|
| Maximum Repetitive Peak Reverse Voltage                    | $V_{RRM}$ | 60      | V    |
| Average Output Rectified Current                           | $I_O$     | 3       | A    |
| Peak One Cycle Surge Forward Current (Non-Repetitive 60Hz) | $I_{FSM}$ | 70      | A    |
| Junction Temperature                                       | $T_j$     | -40 150 |      |
| Storage Temperature Range                                  | $T_{stg}$ | -40 150 |      |

#### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

| CHARACTERISTIC                  | SYMBOL        | TEST CONDITION                             | MIN. | TYP. | MAX. | UNIT |
|---------------------------------|---------------|--|------|------|------|------|
| Peak Forward Voltage            | $V_{FM}$      | $I_{FM}=3.0A$                              | -    | -    | 0.6  | V    |
| Repetitive Peak Reverse Current | $I_{RRM}$     | $V_{RRM}=\text{Rated}$                     | -    | -    | 0.2  | mA   |
| Thermal Resistance              | $R_{th(j-l)}$ | Junction to lead                           | -    | -    | 23   | /W   |
|                                 | $R_{th(j-a)}$ | Junction to ambient (on alumina substrate) | -    | -    | 108  |      |

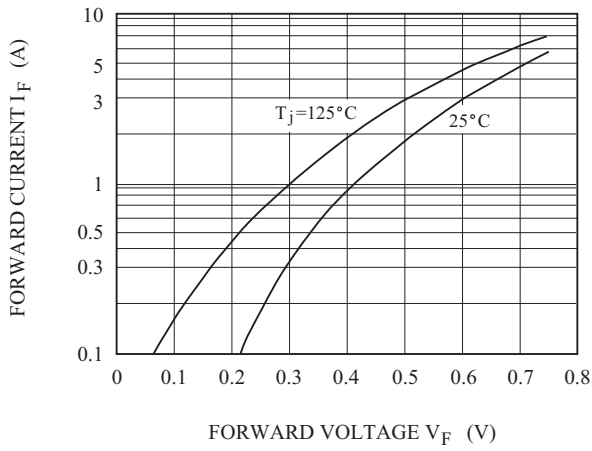


#### Marking

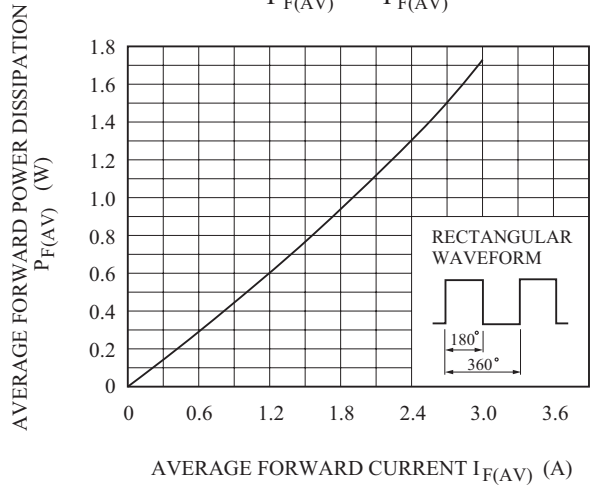


# SMAB36

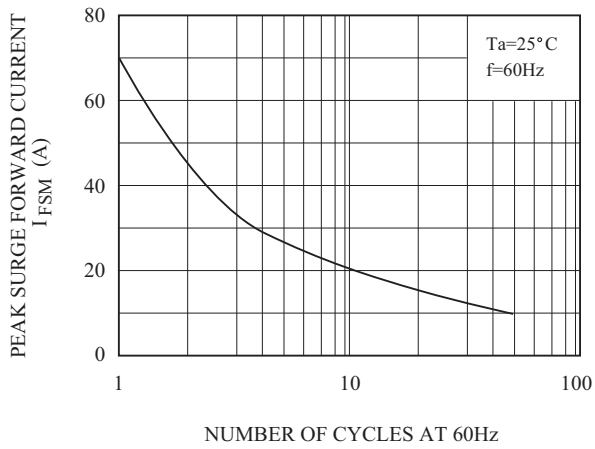
$I_F - V_F$



$P_{F(AV)} - I_{F(AV)}$



SURGE FORWARD CURRENT (NON - REPETITIVE)



$T_a - I_{F(AV)}$

