

## SB340S

### SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 40V

CURRENT: 3.0A

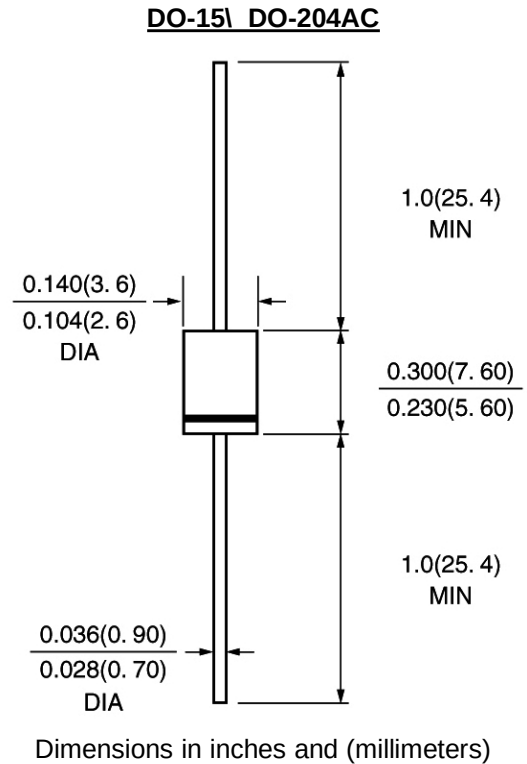


#### FEATURE

High current capability, Low forward voltage drop  
Low power loss, high efficiency  
High surge capability  
High temperature soldering guaranteed  
250°C /10sec/0.375" lead length at 5 lbs tension

#### MECHANICAL DATA

Terminal: Plated axial leads solderable per  
MIL-STD 202E, method 208C  
Case: Molded with UL-94 Class V-0 recognized Flame  
Retardant Epoxy  
Polarity: color band denotes cathode  
Weight: 0.4g  
Mounting position: any



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

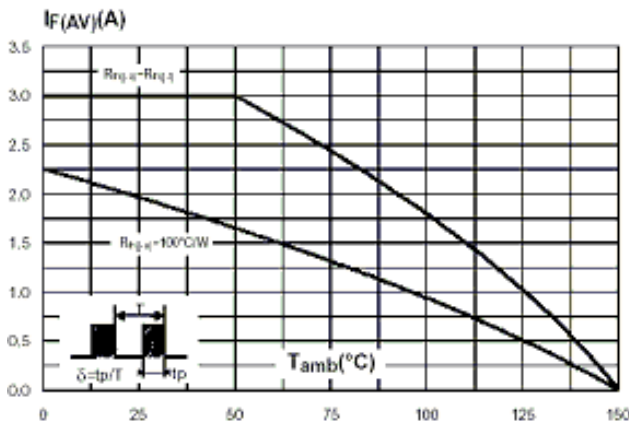
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

|                                                                                   | SYMBOL               | SB340S      | units |
|-----------------------------------------------------------------------------------|----------------------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage                                            | V <sub>rrm</sub>     | 40          | V     |
| Maximum RMS Voltage                                                               | V <sub>rms</sub>     | 28          | V     |
| Maximum DC blocking Voltage                                                       | V <sub>dc</sub>      | 40          | V     |
| Maximum Average Forward Rectified Current 3/8" lead length                        | I <sub>f(av)</sub>   | 3.0         | A     |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I <sub>fsm</sub>     | 100         | A     |
| Maximum Forward Voltage at 3.0A DC                                                | V <sub>f</sub>       | 0.5         | V     |
| Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C        | I <sub>r</sub>       | 0.5<br>20   | mA    |
| Typical Junction Capacitance (Note 1)                                             | C <sub>j</sub>       | 150.0       | pF    |
| Non-repetitive peak reverse avalanche energy                                      | E <sub>ARM</sub>     | 6           | mJ    |
| Typical Thermal Resistance (Note 2)                                               | R <sub>th(ja)</sub>  | 35.0        | °C /W |
| Storage and Operating Junction Temperature                                        | T <sub>stg, Tj</sub> | -65 to +150 | °C    |

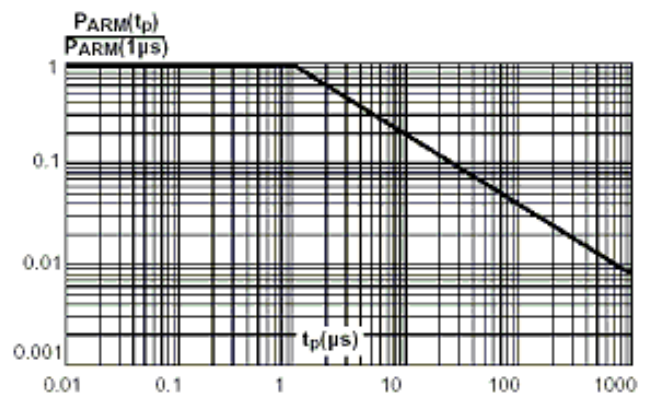
Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.5" lead length, vertical P.C. Board Mounted

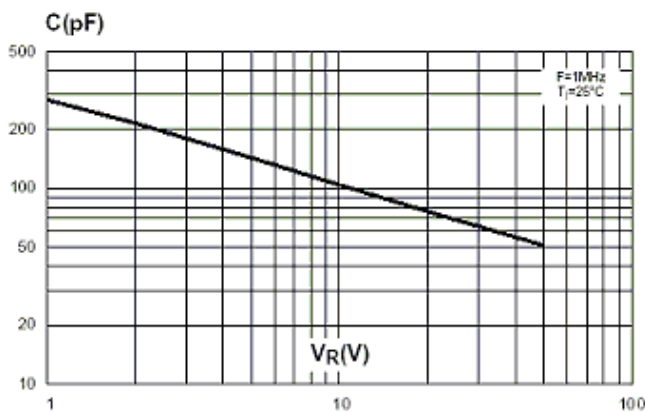
**Fig.1:** Average forward current versus ambient temperature ( $\delta = 0.5$ ) (DO-15).



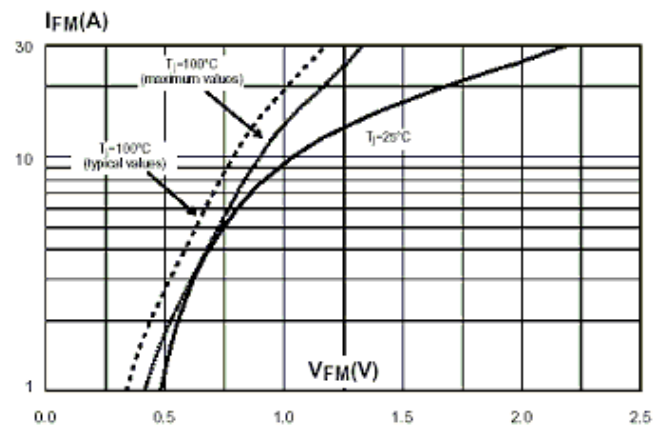
**Fig.2:** Normalized avalanche power derating versus pulse duration.



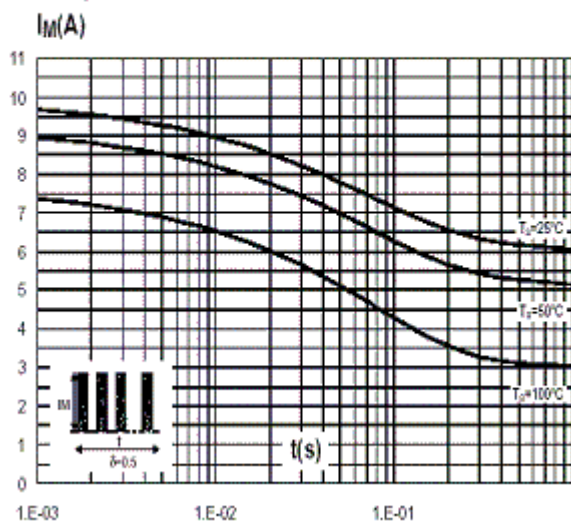
**Fig.3:** Junction capacitance versus reverse voltage applied (typical values).



**Fig.4 :** Forward voltage drop versus forward current (high level, maximum values).



**Fig.5:** Non repetitive surge peak forward current versus overload duration (maximum values)



**Fig.6:** Reverse leakage current versus reverse voltage applied (typical values).

