

# SB340S

## SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 40V

CURRENT: 3.0A



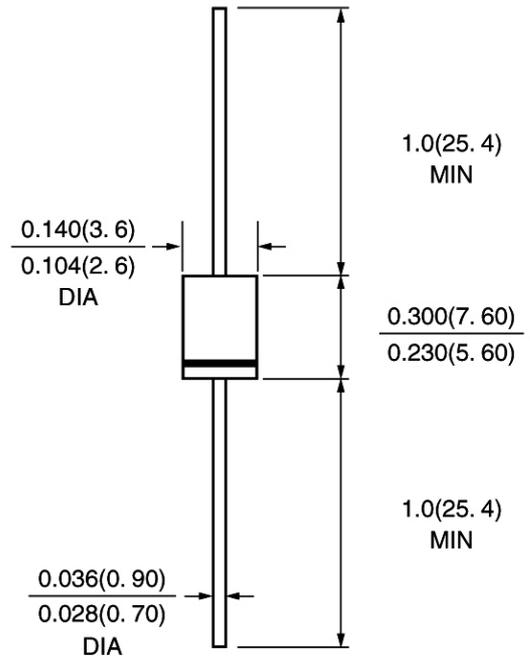
### FEATURE

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

### DO-15\ DO-204AC



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

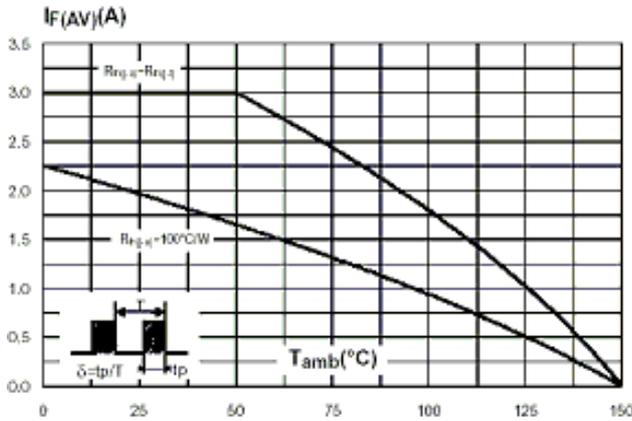
	SYMBOL	SB340S	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	40	V
Maximum RMS Voltage	V <sub>rms</sub>	28	V
Maximum DC blocking Voltage	V <sub>dc</sub>	40	V
Maximum Average Forward Rectified Current 3/8" lead length	I <sub>f(av)</sub>	3.0	A
Peak Forward Surge Current 8.3ms single half 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 at rated DC blocking voltage	I <sub>r</sub>	0.5 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:

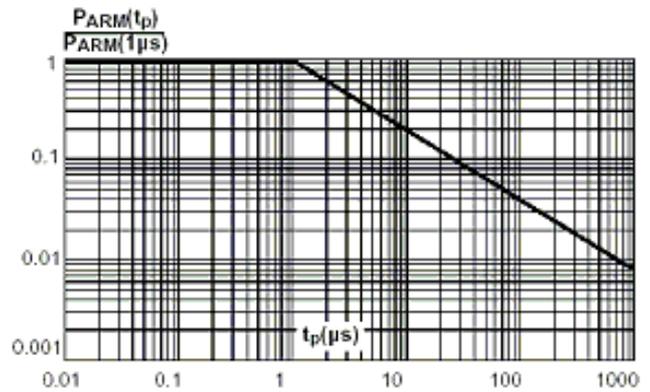
1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.5" lead length, vertical P.C. Board Mounted

## RATINGS AND CHARACTERISTIC CURVES SB340S

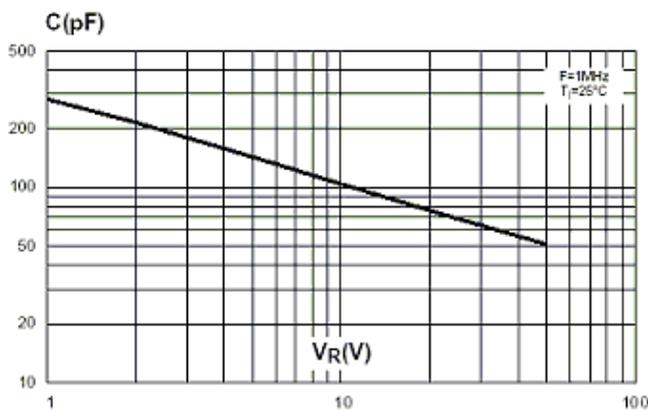
**Fig.1:** Average forward current versus ambient temperature ( $\delta = 0.5$ ) (DO-15).



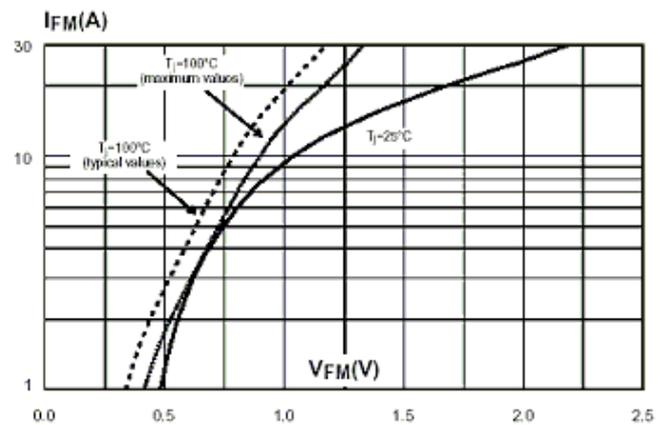
**Fig.2:** Normalized avalanche power derating versus pulse duration.



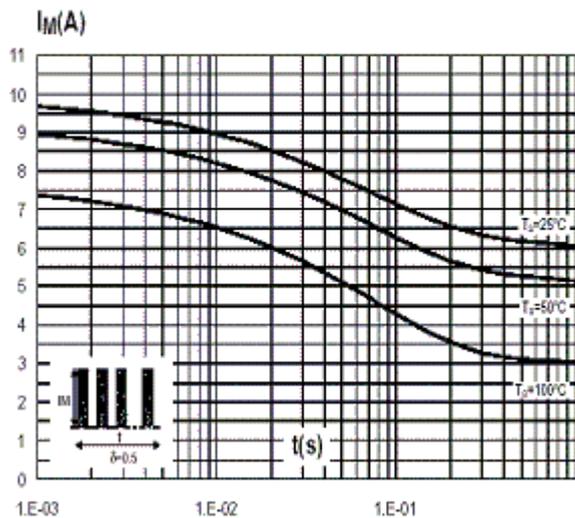
**Fig.3:** Junction capacitance versus reverse voltage applied (typical values).



**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).

