

# SCHOTTKY BARRIER RECTIFIER

肖特基二极管

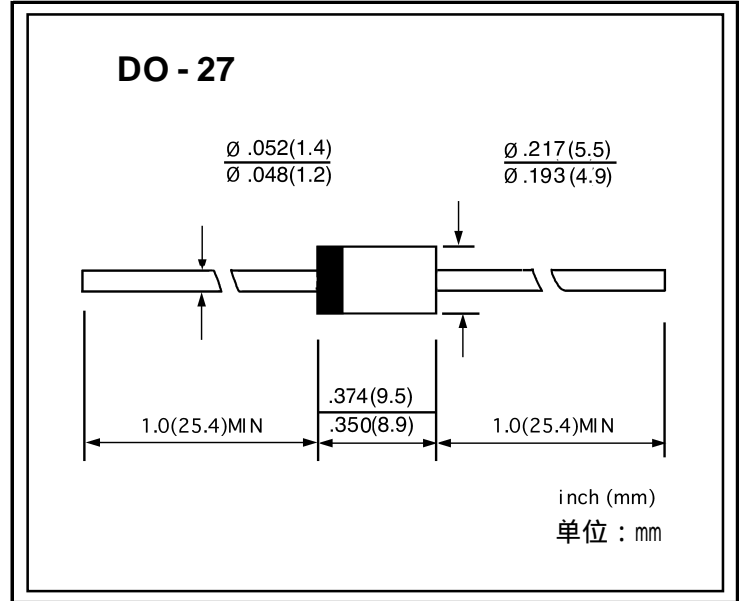
 电压 **VOLTAGE RANGE: 40 V**

 电流 **CURRENT: 5.0 A**
**FEATURES 特征**

- ◇ Metal-Semiconductor junction with guard ring  
金属-半导体结
- ◇ Epitaxial construction 外延片结构
- ◇ Low forward voltage drop, low switching losses  
正向压降低, 开关损耗低
- ◇ High surge capability 大浪涌电流
- ◇ For use in low voltage, high frequency inverters free wheeling, and polarity protection applications

**MECHANICAL DATA 机械数据**

- ◇ Case: JEDEC DO-27, molded plastic  
封装: D0-27
- ◇ Polarity: Color band denotes cathode  
极性标注在管体
- ◇ Weight: 0.041 ounces, 1.15 grams 重量: 1.15克
- ◇ Mounting position: Any 贴片位置: 任意


**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS 极值和电子特性**

Ratings at 25°C ambient temperature unless otherwise specified. TA = 25°C 除非另有规定。

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		SB54	UNITS
最大可重复峰值反向电压	$V_{RRM}$	40	V
最大均方根电压	$V_{RMS}$	28	V
最大直流阻断电压	$V_{DC}$	40	V
最大正向平均整流电流 (See FIG.1)	$I_{F(AV)}$	5.0	A
峰值正向浪涌电流 8.3ms单一正弦半波  @T <sub>J</sub> =125°C	$I_{FSM}$	200.0	A
最大正向电压 @ 5.0 A (Note 1)	$V_F$	0.40	V
最大反向电流 @T <sub>A</sub> =25°C @T <sub>A</sub> =100°C	$I_R$	0.5	mA
		25.0	
结电容 (Note2)	$C_J$	50	pF
典型热阻(结到环境) (Note3)	$R_{\theta JA}$	10	°C/W
结温	$T_J$	-55 --- +150	°C
储存温度	$T_{STG}$	-55 --- +150	°C

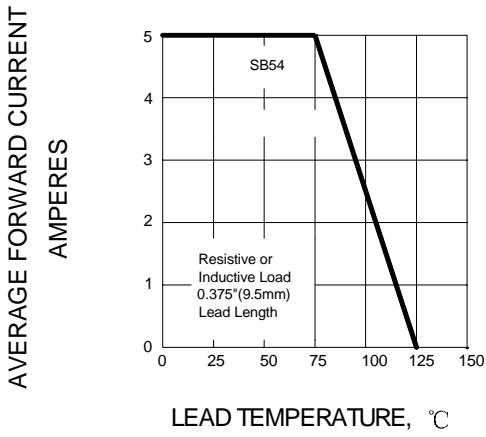
NOTE: 1. Pulse test : 300 μs pulse width, 1% duty cycle.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

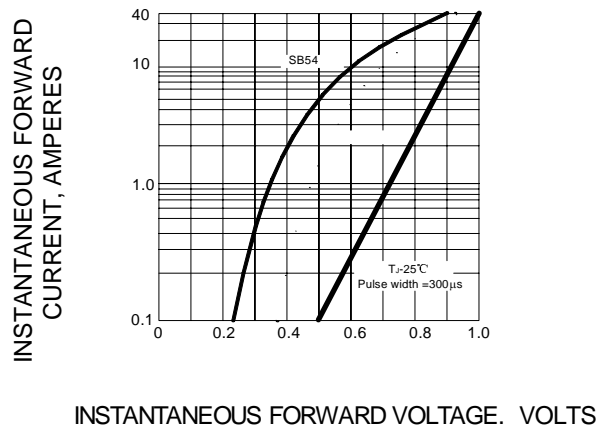
3. Thermal resistance junction to ambient

[www.diodecy.com](http://www.diodecy.com)

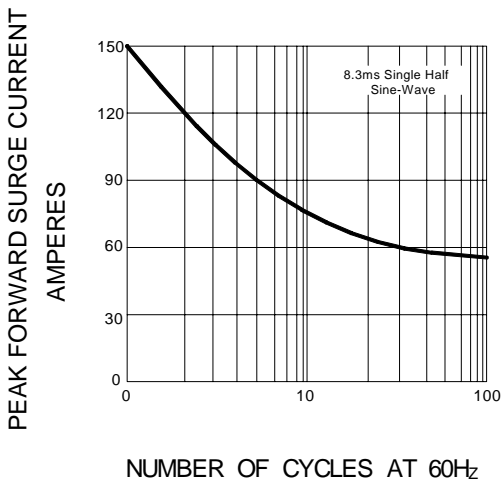
正向电流降额曲线  
**FIG.1 – FORWARD CURRENT DERATING CURVE**



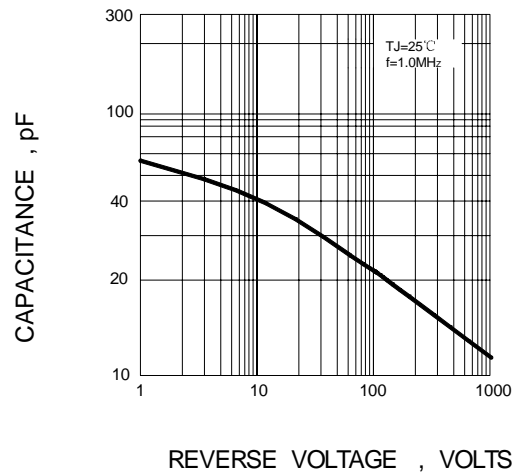
正向特性  
**FIG.2 – TYPICAL FORWARD CHARACTERISTICS**



非重复性正向浪涌峰值电流  
**FIG.3 – MAX NON-REPETITIVE PEAK FWD SURGE CURRENT**



结电容  
**FIG.4 – TYPICAL JUNCTION CAPACITANCE**



反向特性  
**FIG.5 – TYPICAL REVERSE CHARACTERISTICS**

