

Power Schottky Rectifier - 5Amp 40~100Volt

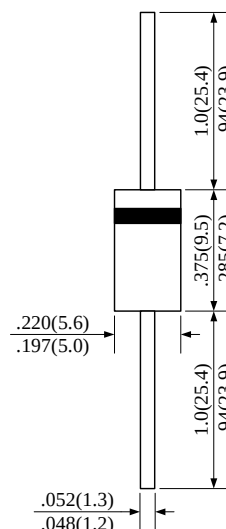
□ Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

□ Mechanical data

- Case : Molded plastic
- Epoxy : UL 94V-0 rate flame retardant
- Lead : Axial leads, solderable per MIL-STD-202,method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 1.10 grams

DO-27 / DO-201AD



□ Maximum ratings and Electrical characteristics

TYPE		SB540L	SB560L	SB5100L	UNIT
Maximum Recurrent Peak Reverse Voltage		40	60	100	V
Maximum RMS Voltage		28	42	70	V
Maximum DC Blocking Voltage		40	60	100	V
Maximum Average Forward Rectified Current		5.0			A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load		230			A
Maximum Instantaneous Forward Voltage at 5.0A		0.47	0.60	0.76	V
Repetitive peak avalanche power, $t_p = 1\mu s$ $T_j = 25^\circ C$		2700	4000	-	W
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_a = 25^\circ C$	0.5	0.3	0.01	mA
	$T_a = 100^\circ C$	20	15	10	
Typical Junction Capacitance		380			pF
Typical Thermal Resistance $R_{\theta JA}$		10			$^\circ C/W$
Operating Temperature Range T_j		-50 to +150		-50 to +175	$^\circ C$
Storage Temperature Range T_{STG}		-50 to +150			

Note: Pulse Test : 380 μs pulse width, 2% duty cycle

June 2009 / Rev.6.4

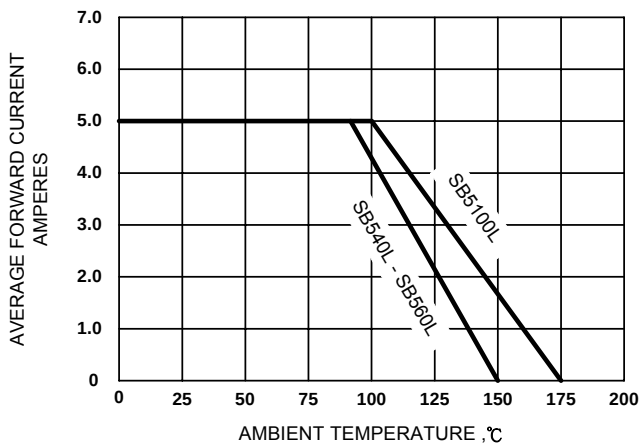


Figure 1. Forward Current Derating Curve

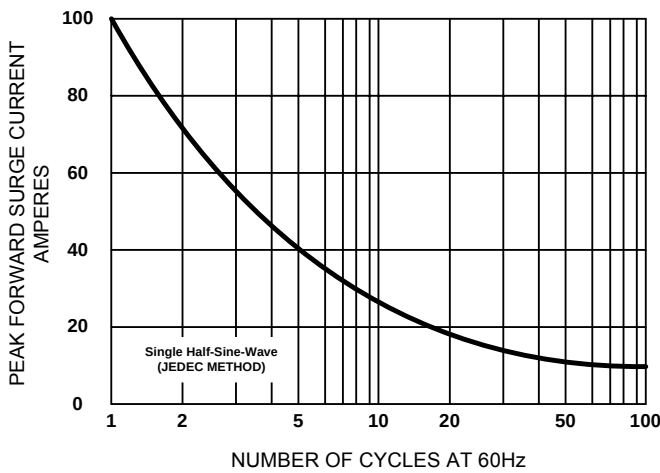


Figure 2. Maximum Non-repetitive Surge Current

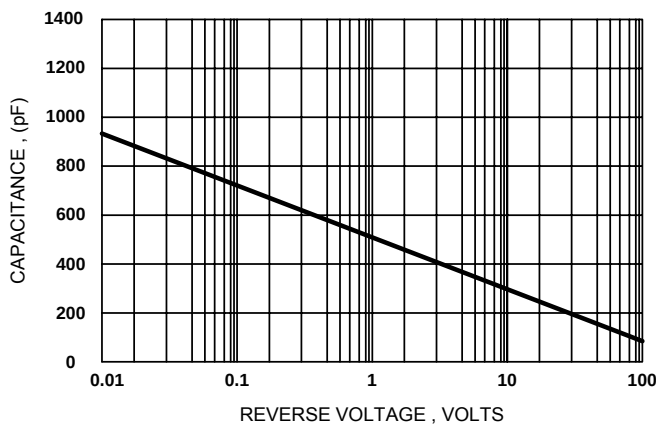


Figure 3. Typical Junction Capacitance

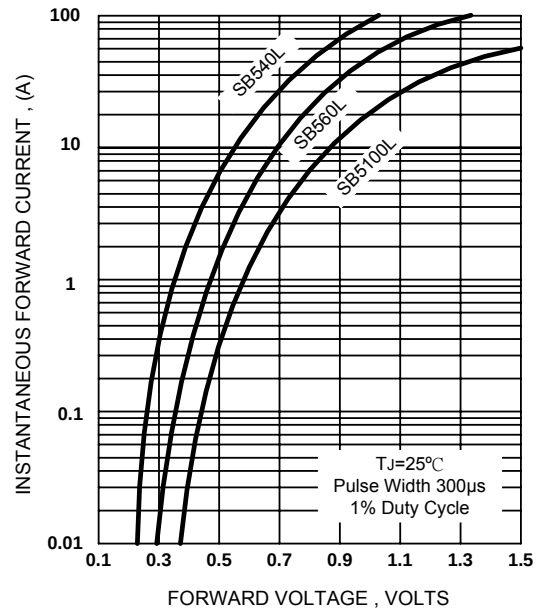


Figure 4. Typical Forward Characteristics

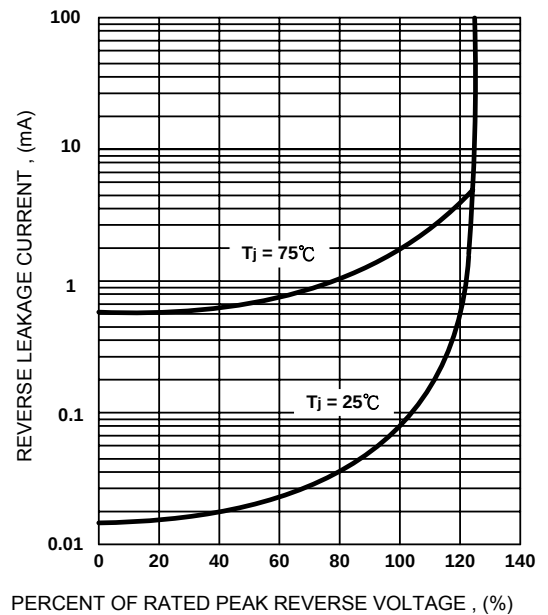


Figure 5. Typical Reverse Characteristics