

Power Schottky Rectifier - 1Amp 40~100Volt

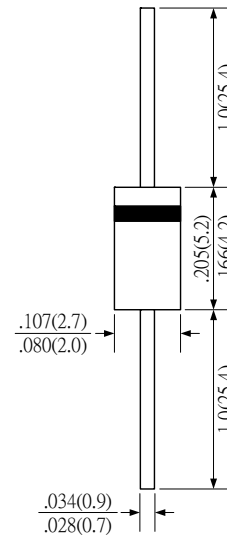
Features

- 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 : 0.34 grams

D0-41



Maximum ratings and Electrical characteristics

TYPE	SB140E	SB160E	SB1100E	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	1.0			A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	30			A
Maximum Instantaneous Forward Voltage at 1.0A	0.55	0.65	0.82	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta = 25°C	0.5	0.3	mA
	Ta = 100°C	20	15	
Typical Junction Capacitance	110			pF
Typical Thermal Resistance R _{θJA}	50			°C/W
Operating Temperature Range T _J	-50 to +150		-50 to +175	°C
Storage Temperature Range T _{STG}	-50 to +150			°C

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

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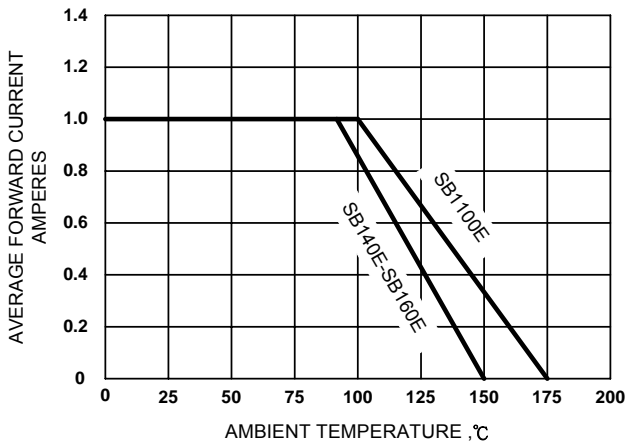


Figure 1. Forward Current Derating Curve

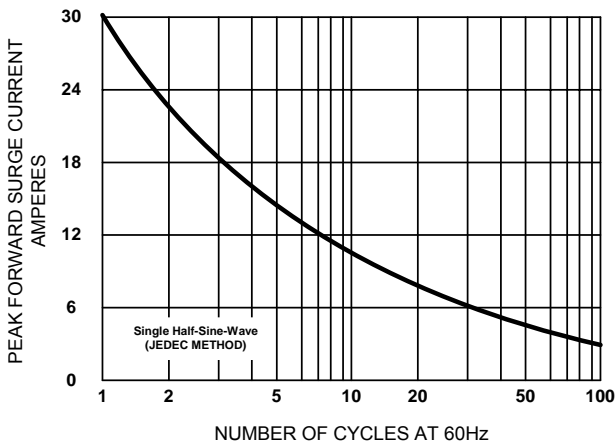


Figure 2. Maximum Non-repetitive Surge Current

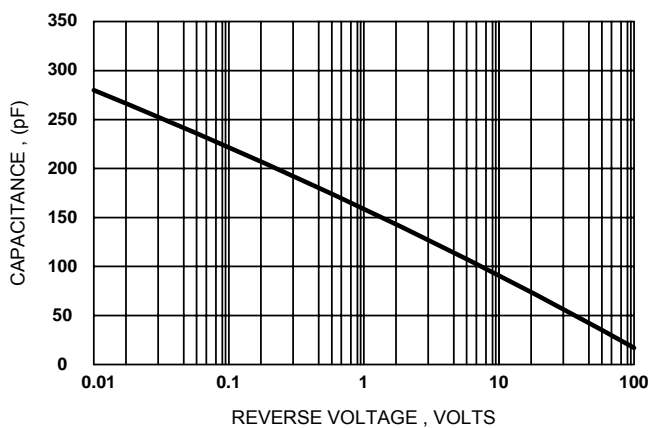


Figure 3. Typical Junction Capacitance

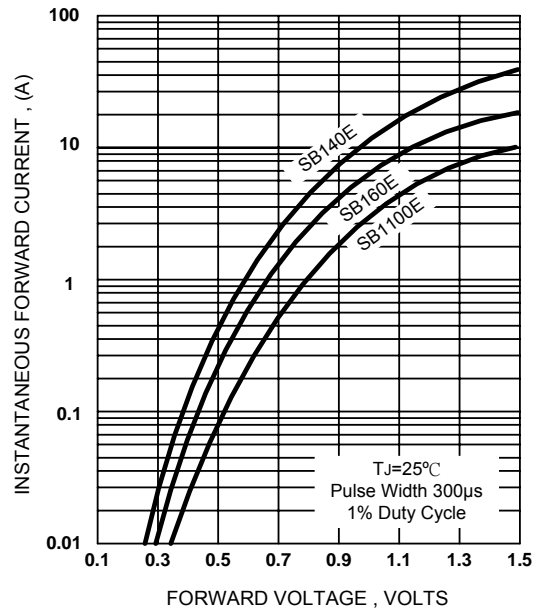


Figure 4. Typical Forward Characteristics

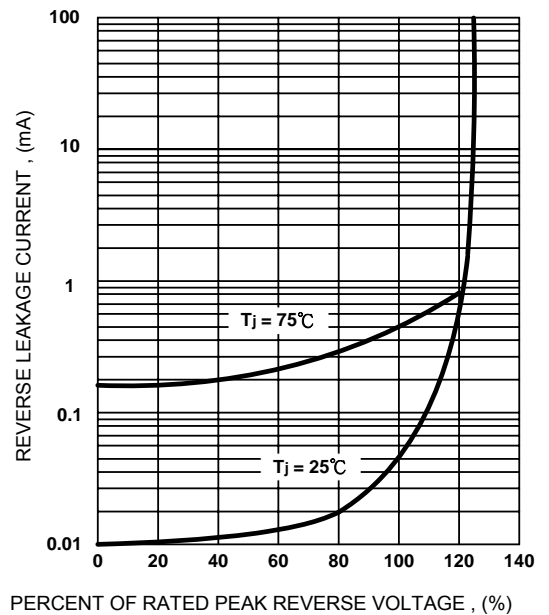


Figure 5. Typical Reverse Characteristics