

20 to 200V, 3A Schottky Barrier Rectifiers

Features

- ✧ Low power loss,high efficiency
- ✧ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ✧ For use in low voltage high frequency inverters, free wheeling and polarity protection applications
- ✧ Guardring for over voltage protection
- ✧ High temperature soldering guaranteed: 260°C/10 seconds at terminals



Circuit Diagram

Mechanical Data

- ✧ Molded plastic over sky die
- ✧ JEDEC DO-214AC
- ✧ Color band denotes cathode end
- ✧ Handling precaution:None
- ✧ Weight: 0.0023 oz., 0.07 g



SMA

Absolute Maximum Rating ($T_A = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

Parameter Symbol	symbol	OVB 320A	OVB 340A	OVB 360A	OVB 380A	OVB 3100A	OVB 3150A	OVB 3200A	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	150	200	V
Maximum average forward rectified current at $T_L=100\text{ }^{\circ}\text{C}$	$I_F(AV)$	3.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80							A
Typical thermal resistance (Note 1)	$R_{\theta JA}$	80							$^{\circ}\text{C/W}$
Operating junction and storage temperature rang	T_J, T_{STG}	-55 to +150							$^{\circ}\text{C}$

Electrical Characteristics ($T_A = 25^\circ\text{C}$, unless otherwise specified)

Parameter Symbol	symbol	OVB 320A	OVB 340A	OVB 360A	OVB 380A	OVB 3100A	OVB 3150A	OVB 3200A	Unit
Maximum instantaneous forward voltage at 3.0A	V_F	0.55	0.70	0.85	0.95				V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 100^\circ\text{C}$	IR	0.5 50.0				0.05 10.0			mA

Typical Characteristics ($T_A = 25^\circ\text{C}$, unless otherwise specified)

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

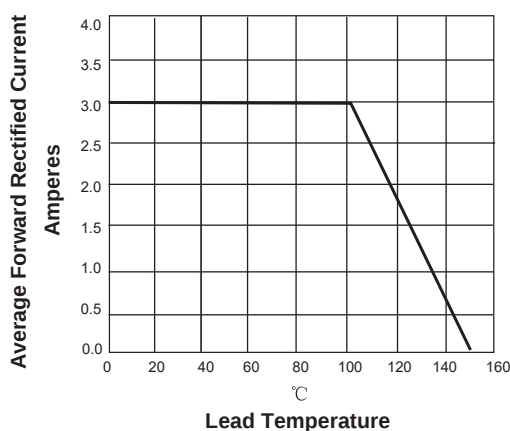


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

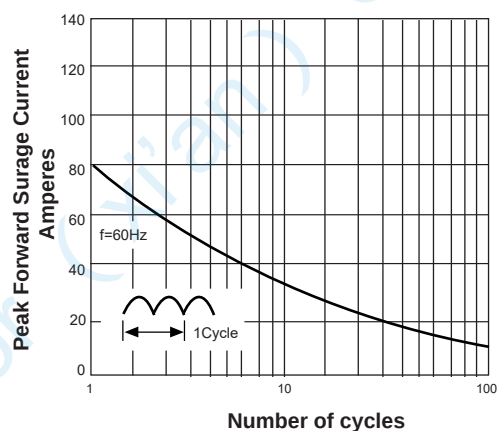


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

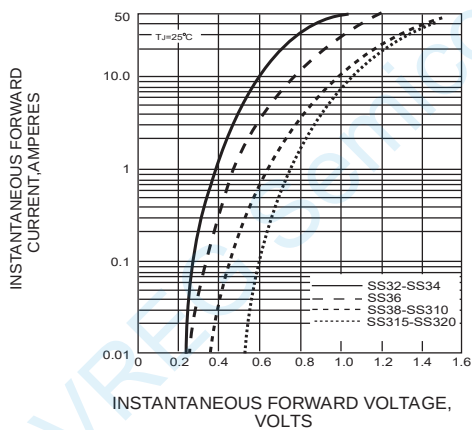
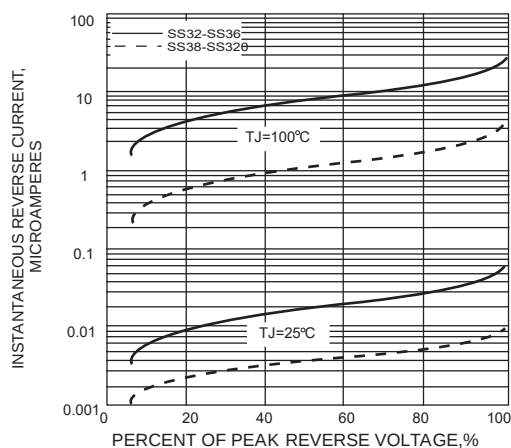
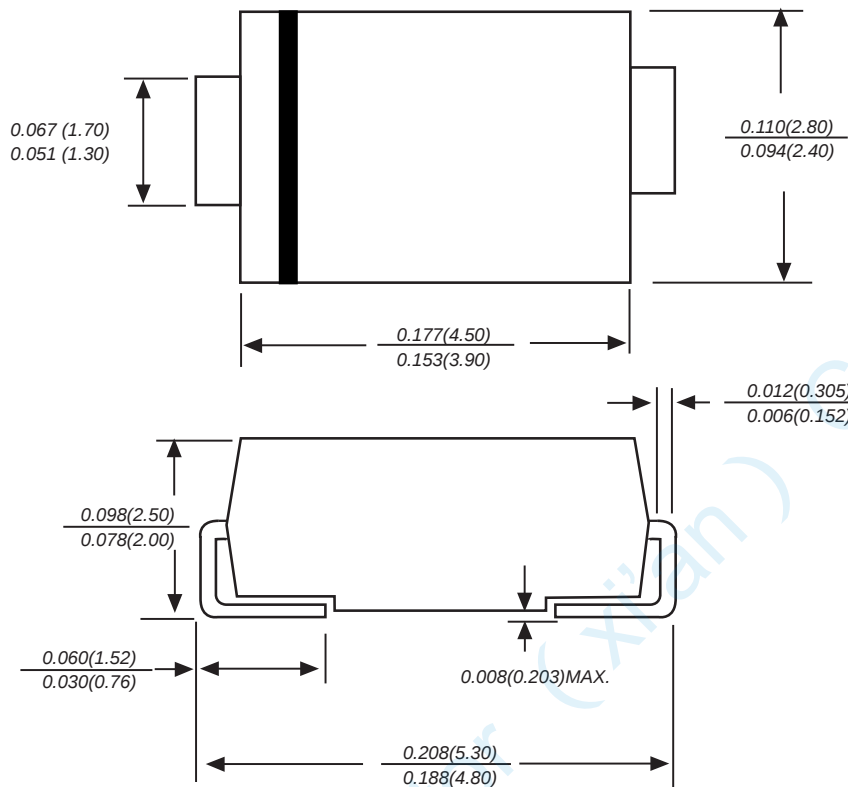


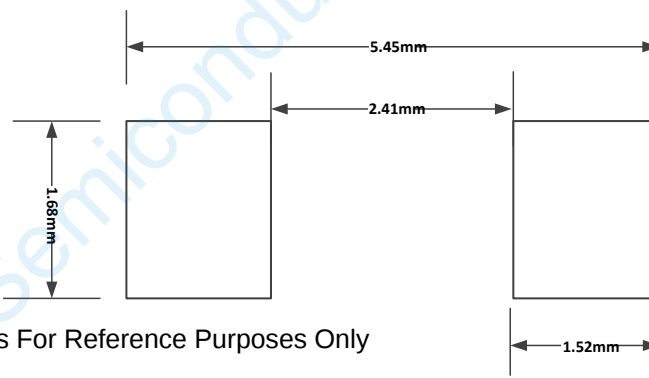
FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Package Information

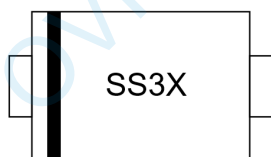


Recommend PCB Layout



Notes: This PCB Layout Is For Reference Purposes Only

Marking



X: 2,4,6,8,10,15,20
2: $V_{RRM}=20V$
4: $V_{RRM}=40V$
6: $V_{RRM}=60V$
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Ordering Information

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
OVB320A Series	11'	278	5	285	10	355*310*310	80
	13'	330	7.5	340	15	360*360*360	120