

20 to 200V, 2A 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 220A	OVB 240A	OVB 260A	OVB 280A	OVB 2100A	OVB 2150A	OVB 2200A	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 $T_L=100\text{ }^{\circ}\text{C}$	$I_F(AV)$	2.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50							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 ($T_A = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

Parameter Symbol	symbol	OV B 220A	OV B 240A	OV B 260A	OV B 280A	OV B 2100A	OV B 2150A	OV B 2200A	Unit
Maximum instantaneous forward voltage at 2.0A	V_F	0.55	0.70	0.85	0.95				V
Maximum DC reverse current $T_A = 25\text{ }^{\circ}\text{C}$ at rated DC blocking voltage $T_A = 100\text{ }^{\circ}\text{C}$	IR	0.5 50.0				0.05 10.0			mA

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

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

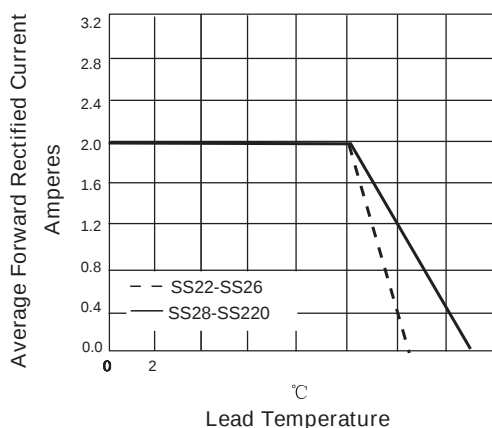


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

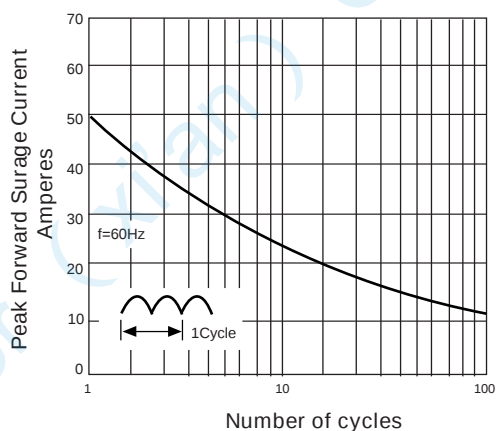


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

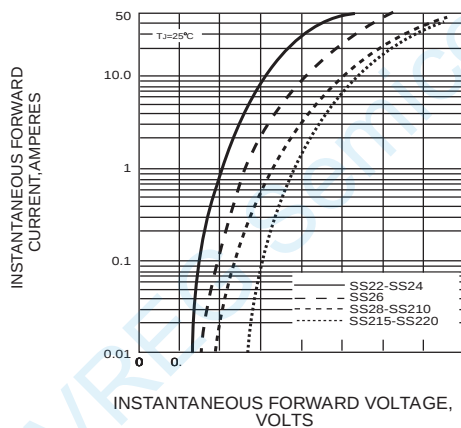
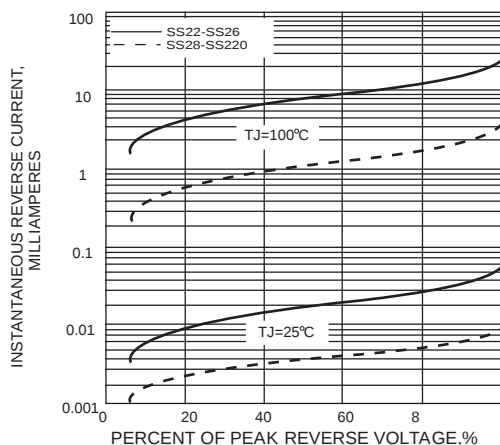
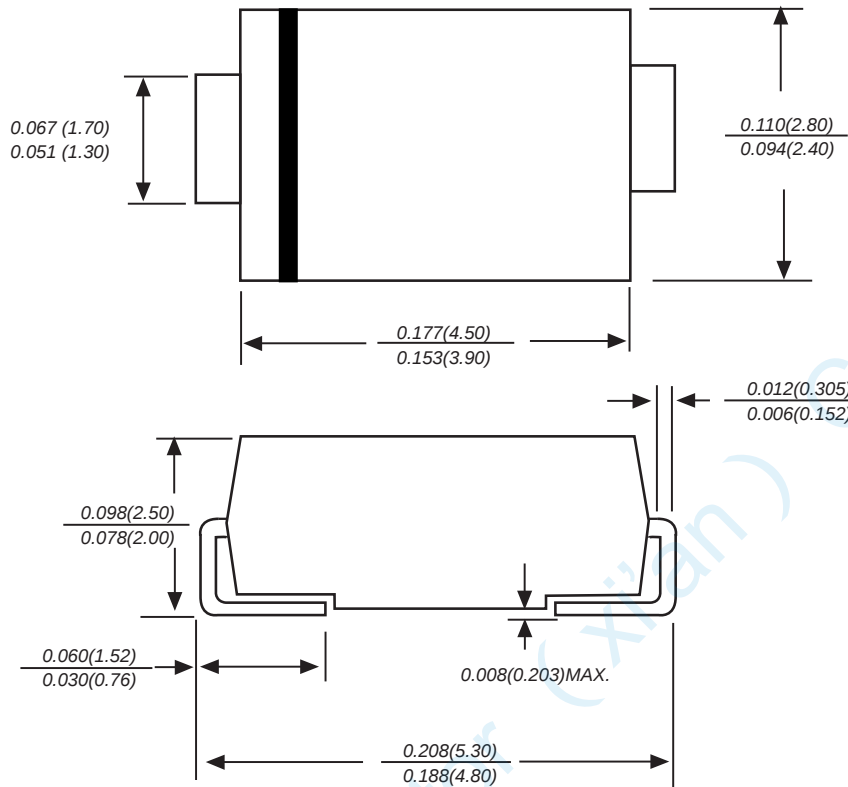


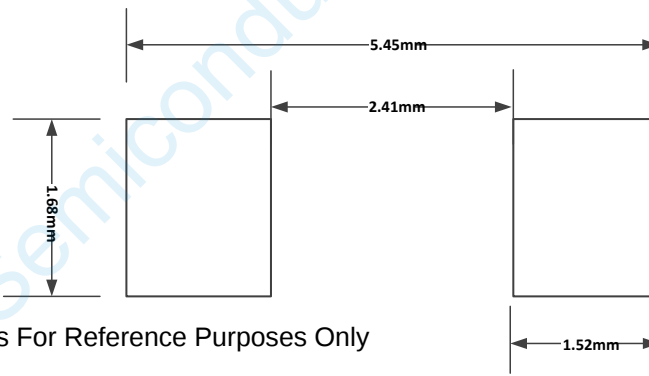
FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Package Information

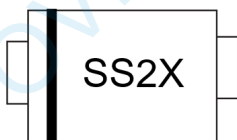


Recommend PCB Layout



Notes: This PCB Layout Is For Reference Purposes Only

Marking



X: Voltage Code
 2 ---- V_{RRM}=20V
 4 ---- V_{RRM}=40V
 6 ---- V_{RRM}=60V
 8 ---- V_{RRM}=80V
 10 ---- V_{RRM}=100V
 15 ---- V_{RRM}=150V
 20 ---- V_{RRM}=200V

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)
OV B220A Series	11'	278	5	285	10	355*310*310	80
	13'	330	7.5	340	15	360*360*360	120