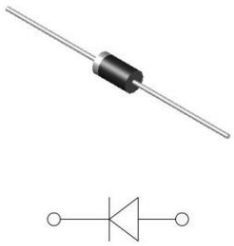
SR320-SR3100 Series

3.0A Schottky Barrier Rectifiers

Features

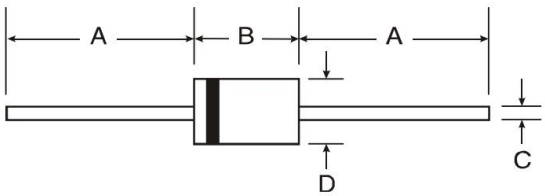
- Low power loss
- Guardring for overvoltage protection
- Extremely fast switching
- High frequency operation
- High forward surge capability



Mechanical Data

- Package: DO-201AD(DO-27)
- Package Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020

Dimensions (DO-201AD/DO-27)



Symbol	Dimension	
	Min	Max
A	25.40	-
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30

Maximum Ratings And Electrical Characteristics (T_A=25℃ unless otherwise noted)

Parameter	Symbol	SR320	SR330	SR340	SR350	SR360	SR380	SR3100	Unit
Repetitive peak reverse voltage	V_{RRM} V_{RWM} V_R	20	30	40	50	60	80	100	V
Average Forward Current	$I_{F(AV)}$	3.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	80							A
Maximum instantaneous forward voltage @3A	V_{FM}	0.55			0.7		0.85		V
Maximum DC reverse current at rated DC blocking voltage per diode@ $V_{RM}=V_{RRM}$	I_{RM} @ 25℃	0.2							mA
	I_{RM} @125℃	20							
Thermal resistance	$R\theta_{J-A}$	25							℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 ~+150							℃

Ratings and Characteristic Curves (T_A=25℃ unless otherwise noted)

Figure 1. Forward Current Derating Curve

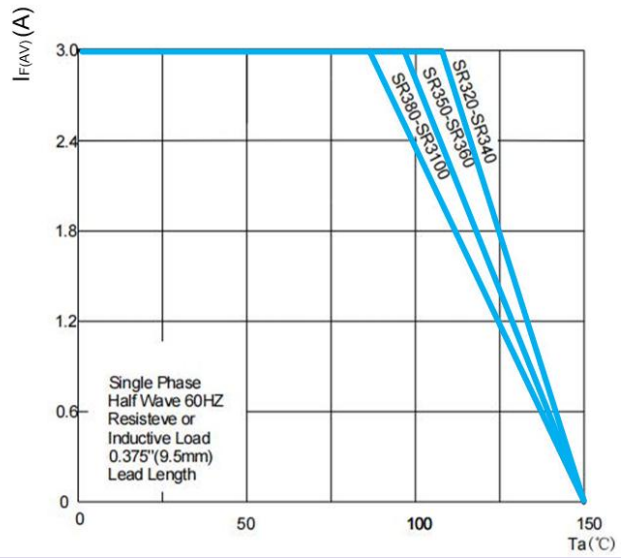


Figure 2.Maximum Non-Repetitive Forward Surge Current

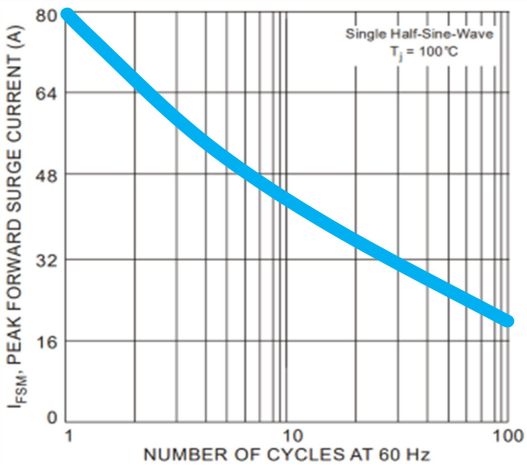


Figure 3.Typical Forward Characteristics

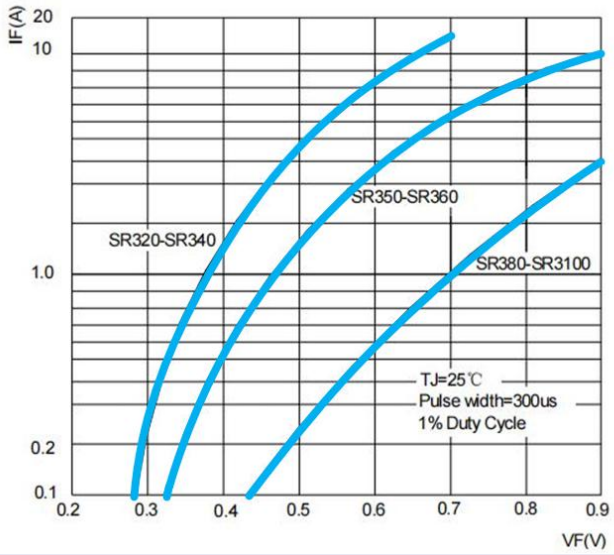
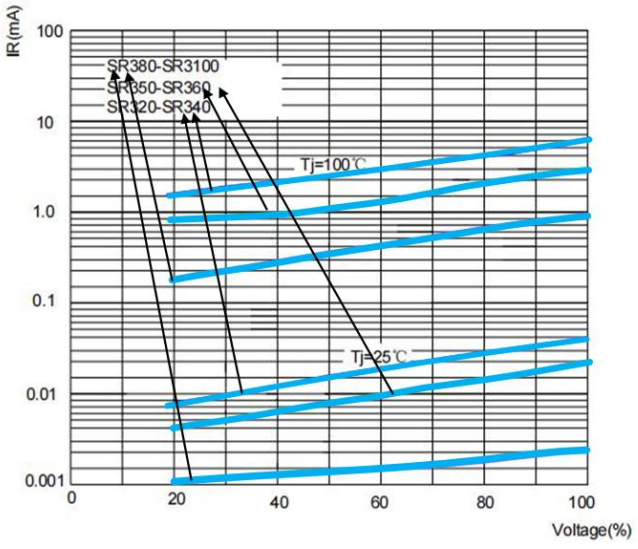
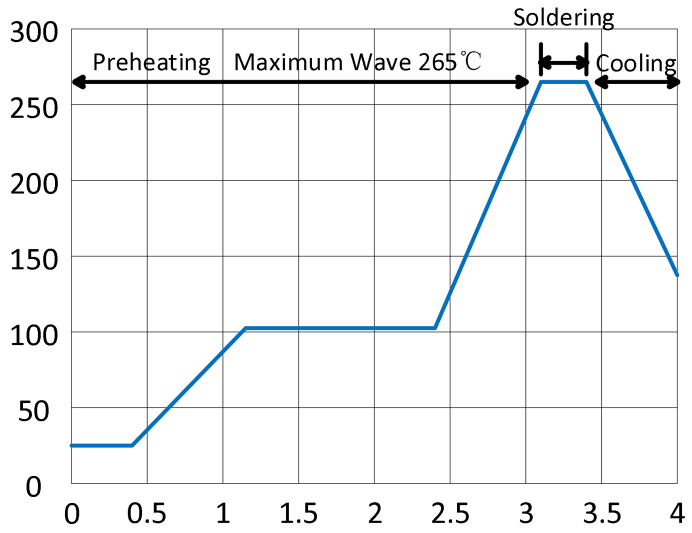


Figure 4.Typical Reverse Characteristics



Wave Soldering Parameters



Condition	Lead-free Assembly
Peak Temperature	265℃
Dipping Time	10 seconds
Soldering	1 time