

Features

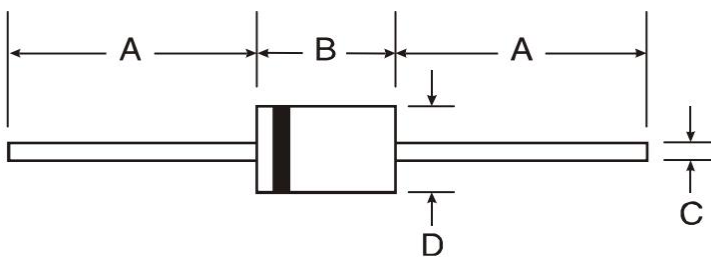
- ◆ Low power loss
- ◆ Guardring for overvoltage protection
- ◆ Extremely fast switching
- ◆ High frequency operation
- ◆ High forward surge capability



Mechanical Data

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

Dimensions (DO-201AD/DO-27)



Symbol	Dimension	
	Millimeters	
	Min.	Max.
A	25.4	-
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30

Maximum Ratings and Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	SR5150	Unit
Repetitive peak reverse voltage	V_{RRM} V_{RWM} V_R	20	30	40	50	60	80	100	150	V
Average Rectified Output Current	$I_{F(AV)}$	5.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	120								A
Maximum instantaneous forward voltage @5A	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°C	0.2								mA
	I_{RM} @125°C	20								
Thermal resistance	$R\theta_{J-A}$	20								°C/W
Typical junction capacitance	C_J	250								pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 ~+150								°C

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Figure 1. Forward Current Derating Curve

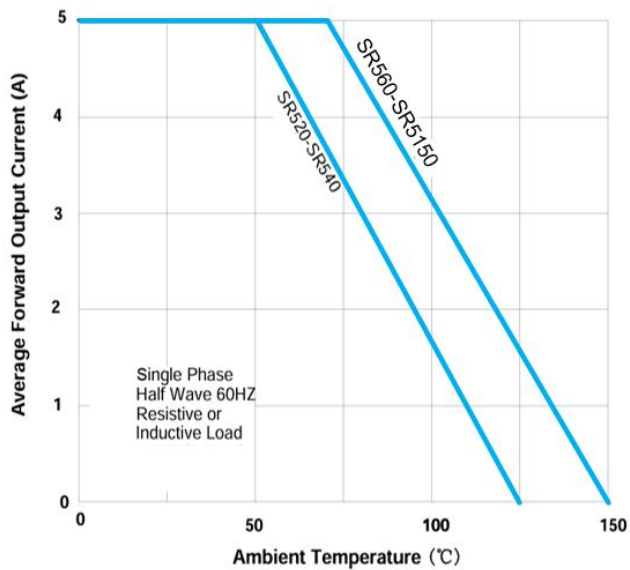


Figure 2. Typical Forward Characteristics

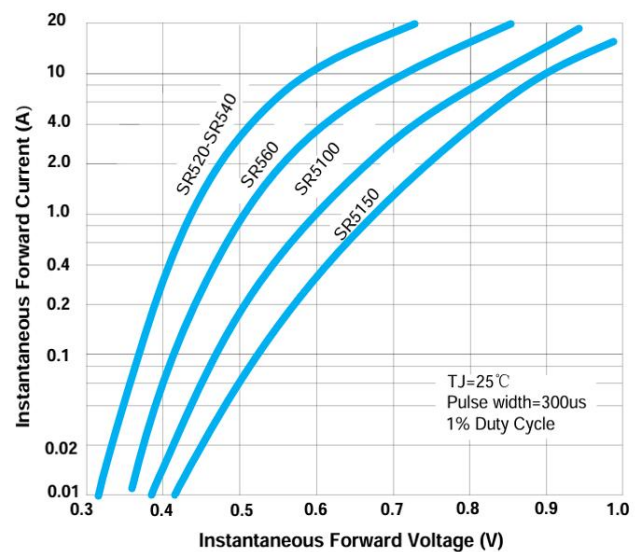


Figure 3. Max Non-Repetitive Peak Fwd Surge Current

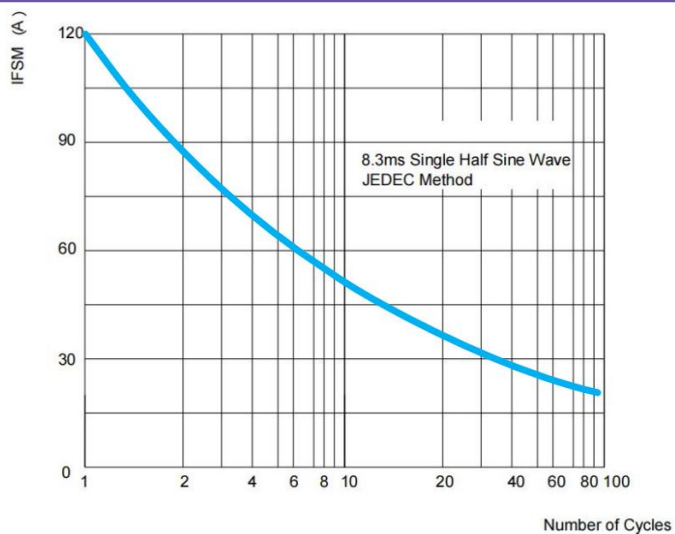
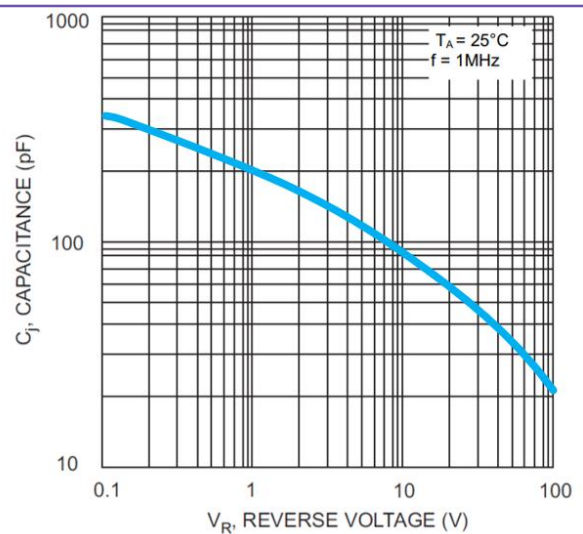


Figure 4. Typical Junction Capacitance



Wave Soldering Parameters

