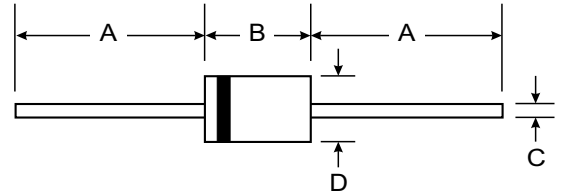
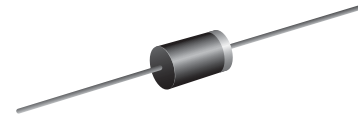


**VOLTAGE RANGE: 30 - 100V**  
**CURRENT: 5.0 A**

### Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

### Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	50SQ030	50SQ040	50SQ045	50SQ060	50SQ080	50SQ100	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>							V
Working Peak Reverse Voltage	V <sub>RWM</sub>	30	40	45	60	80	100	
DC Blocking Voltage	V <sub>R</sub>							
RMS Reverse Voltage	V <sub>R(RMS)</sub>	21	28	31	42	56	70	V
Average Rectified Output Current @T <sub>L</sub> = 100°C (Note 1)	I <sub>O</sub>	5.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150						A
Forward Voltage @I <sub>F</sub> = 5.0A	V <sub>FM</sub>	0.55		0.70		0.85		V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	I <sub>RM</sub>	0.5 50						mA
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	500			400			pF
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub>	10						°C/W
Operating and Storage Temperature Range	T <sub>i</sub> , T <sub>STG</sub>	-65 to +150						°C

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

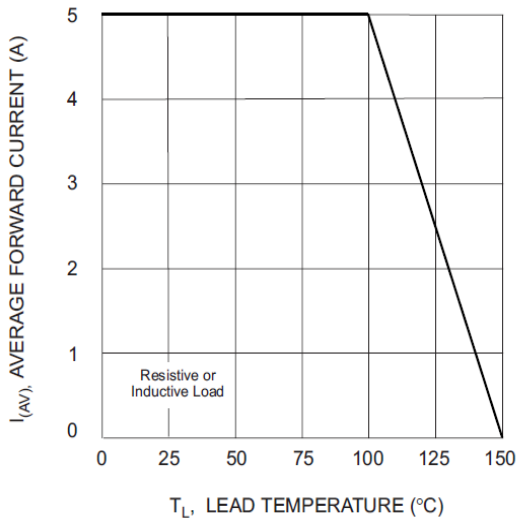


Fig. 1 Forward Current Derating Curve

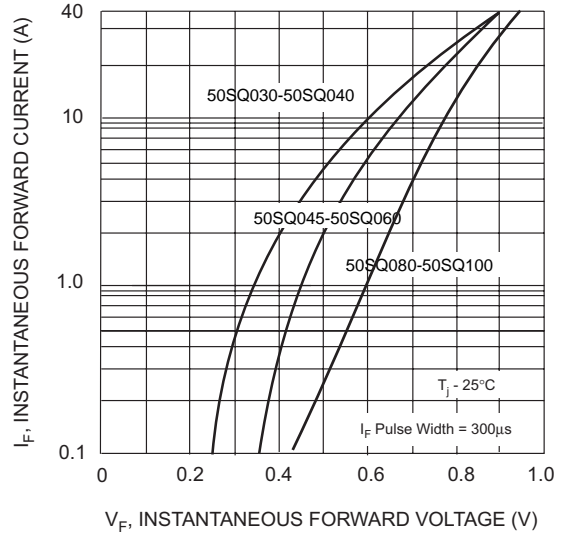


Fig. 2 Typical Forward Characteristics

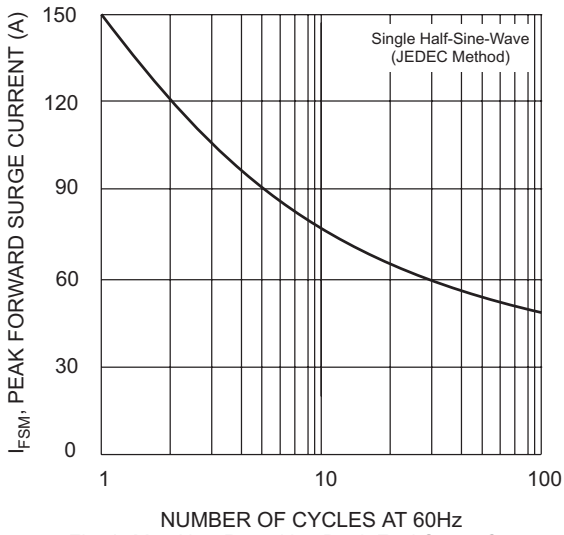


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

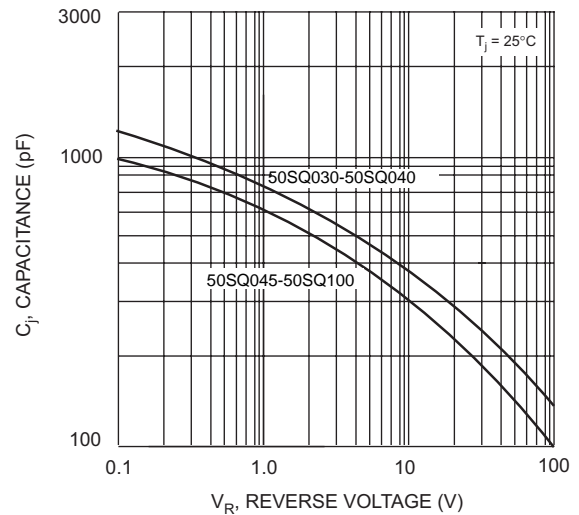


Fig. 4 Typical Junction Capacitance

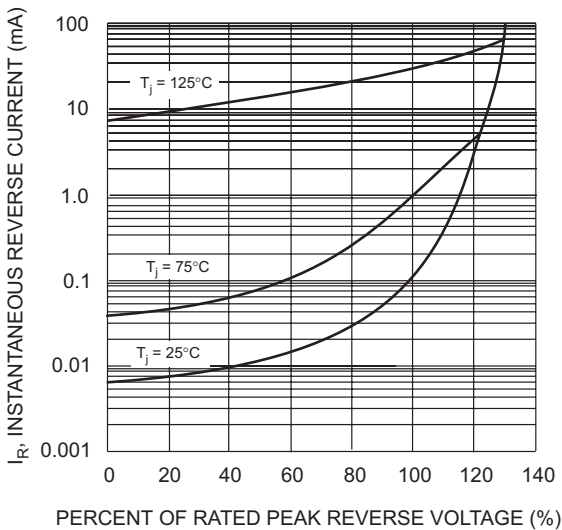


Fig. 5 Typical Reverse Characteristics