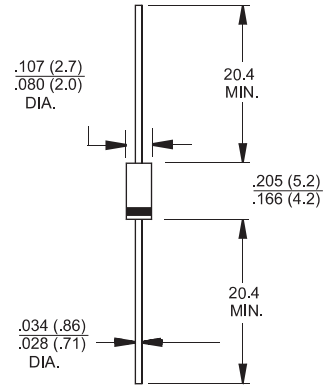




### DO-41



## 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

## Mechanical Data

- ✧ Case: Molded Plastic
- ✧ Polarity: Cathode Band
- ✧ Weight: 0.30 grams (approx.)
- ✧ Mounting Position: Any
- ✧ Marking: Type Number

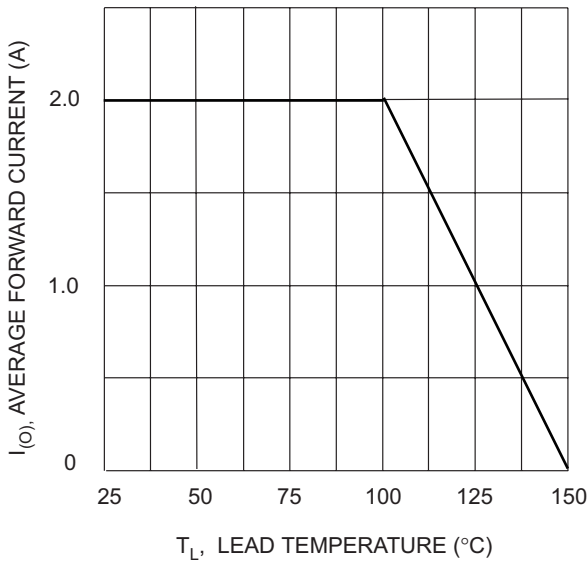
Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

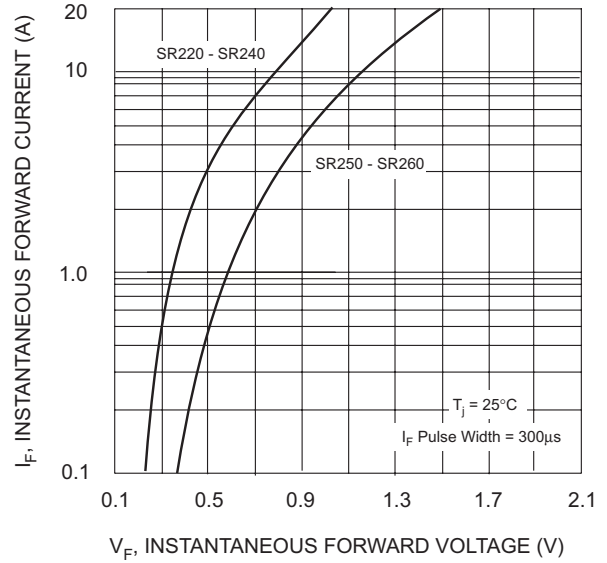
Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%

Type Number	Symbol	SR220	SR230	SR240	SR250	SR260	Unit	
Peak Repetitive Reverse Voltage	$V_{RRM}$							
Working Peak Reverse Voltage	$V_{RWM}$	20	30	40	50	60	V	
DC Blocking Voltage	$V_R$							
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	V	
Average Rectified Output Current (Note 1) @ $T_L = 100^\circ\text{C}$	$I_O$	2.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	25						A
Forward Voltage @ $I_F = 2.0\text{A}$	$V_{FM}$	0.50			0.70		V	
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	0.5 10					mA	
Typical Junction Capacitance (Note 2)	$C_j$	170			140		pF	
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	15					K/W	
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	50					K/W	
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150					$^\circ\text{C}$	

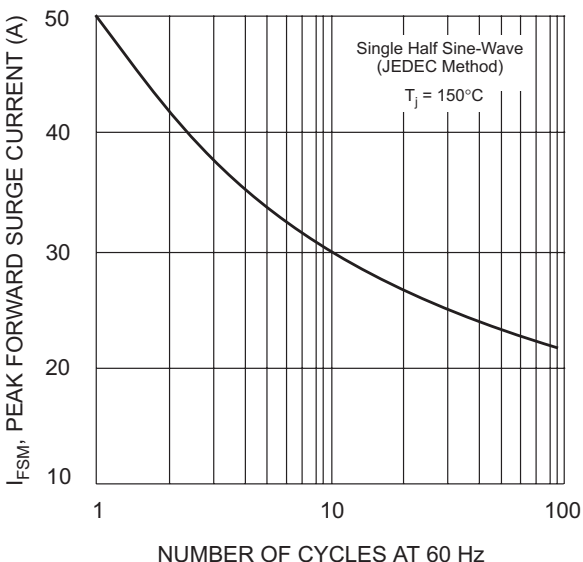
Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



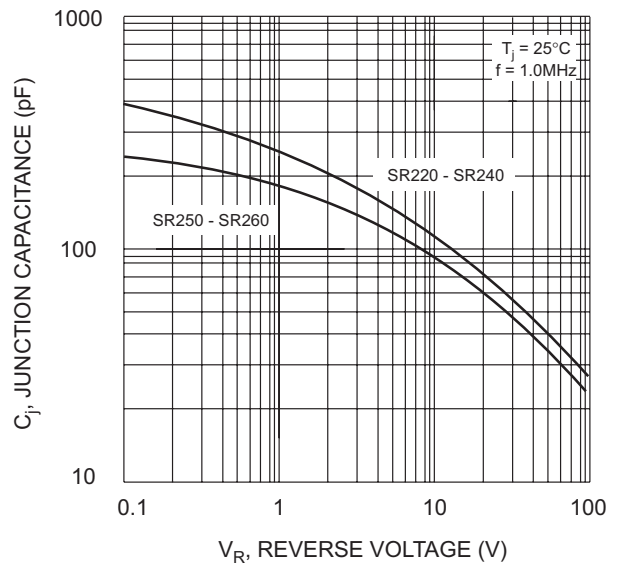
$T_L$ , LEAD TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz  
Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 4 Typical Junction Capacitance

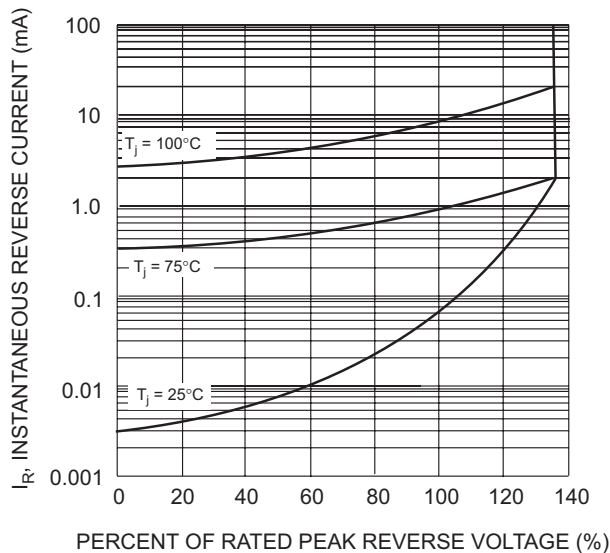


Fig. 5 Typical Reverse Characteristics