

## Schottky Barrier Rectifier

### Reverse Voltage 40 Volts Forward Current 5.0 Amperes

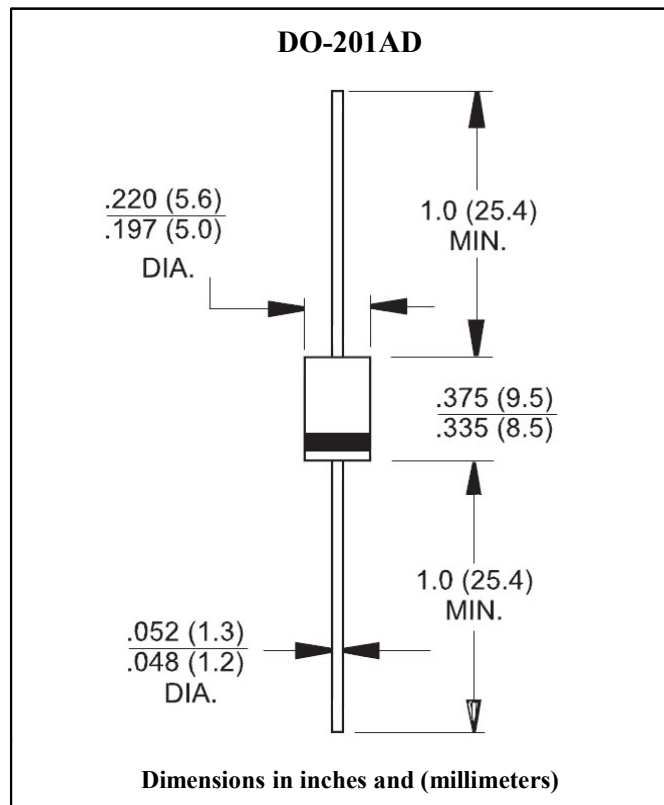
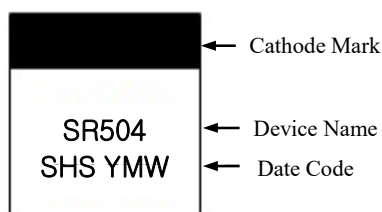
#### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

#### Mechanical Data

- Case : Molded plastic
- Epoxy : UL 94V-O rate flame retardant
- Lead : Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity : Color band denotes cathode end
- High temperature soldering guaranteed : 260°C/10 seconds  
/0.375", (9.5mm) lead lengths at 5lbs., (2.3kg) tension
- Weight : 1.1 grams

#### Marking



#### Maximum Ratings & Electrical Characteristics

Ratings 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%

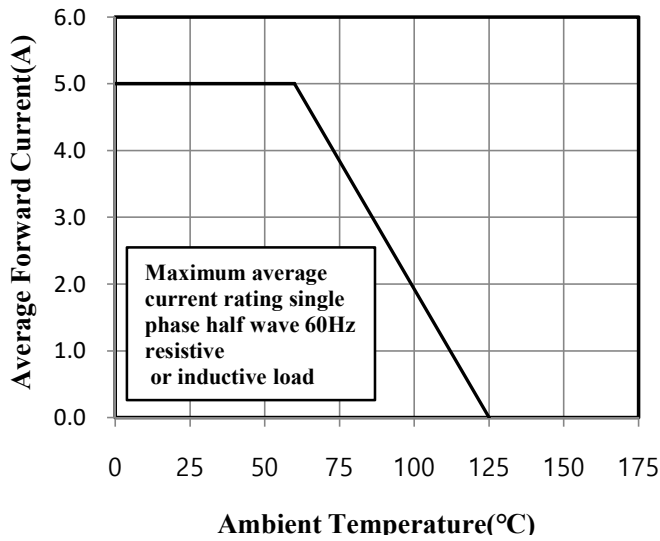
Parameter	Symbol	Rated Value	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V	
Maximum RMS Voltage	$V_{RMS}$	28	V	
Maximum DC Blocking Voltage	$V_{DC}$	40	V	
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length (Fig. 1)	$I_F(AV)$	5.0	A	
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (MIL-STD-750D 4066 Method)	$I_{FSM}$	150	A	
Maximum Instantaneous Forward Voltage at 5.0A	$V_F$	0.55	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.5	mA	$T_a=25^\circ C$
		50	mA	$T_a=100^\circ C$
Typical Junction Capacitance	$C_J$	500	pF	Note 1
Typical Thermal Resistance	$R_{th(j-a)}$	25	$^\circ C/W$	Note 2
Operation Junction Temperature Range	$T_J$	-55 to +125	$^\circ C$	
Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ C$	

Note 1. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.

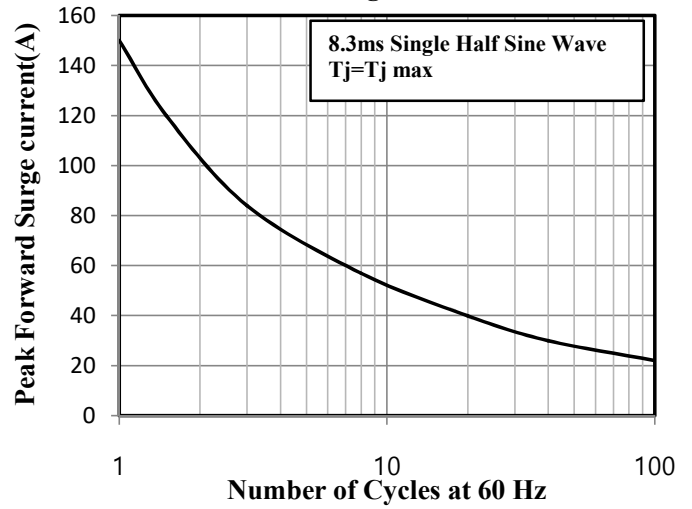
Note 2. Thermal resistance from junction to ambient

**Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)**

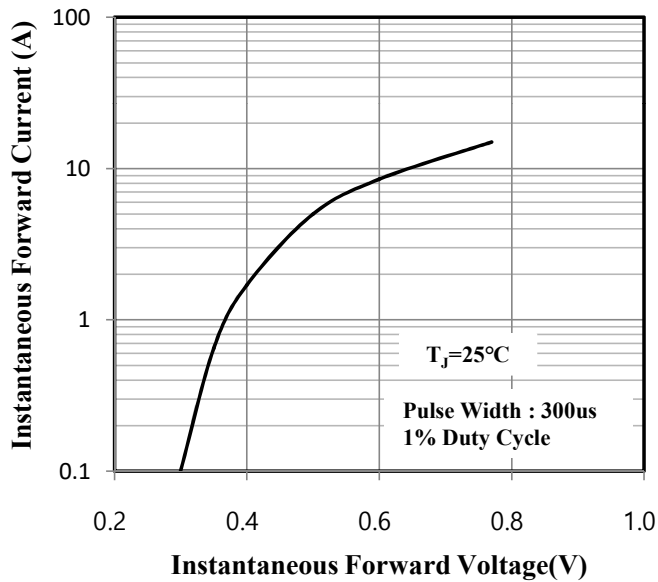
**Fig.1 Forward Current Derating Curve**



**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Reverse Characteristics**

