



Schottky Barrier Rectifiers

Reverse Voltage 20 to 100 Volts, Forward Current 3.0 Amperes

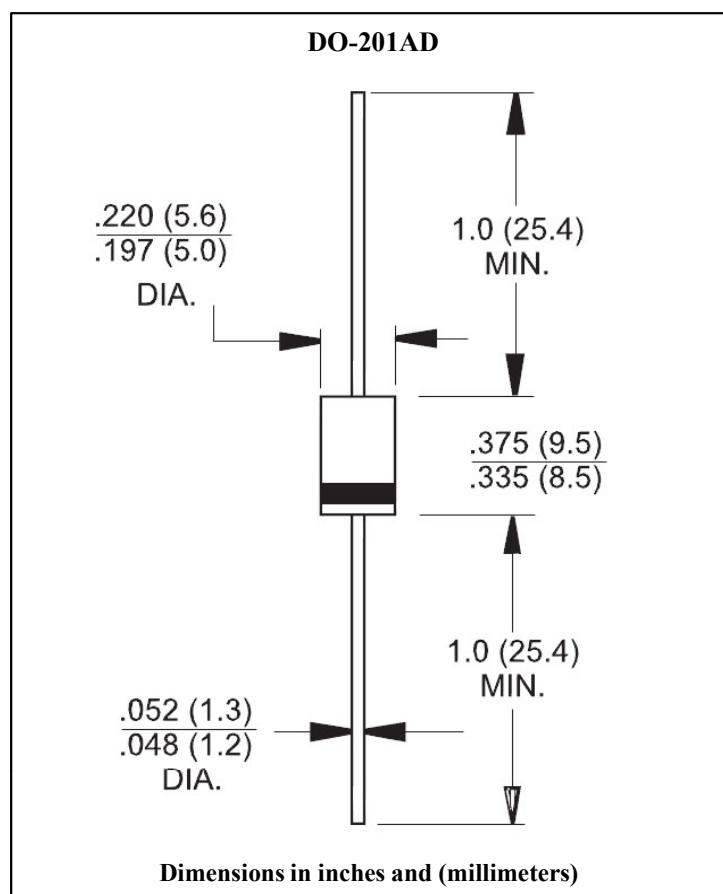
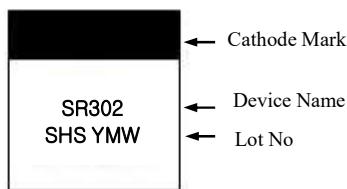
Features

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

Mechanical Data

- Case : Molded plastic DO-201AD
- Epoxy : UL 94V-O rate flame retardant
- Terminals : 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 : 1.1grams

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	SR302	SR303	SR304	SR305	SR306	SR309	SR3A0	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	90	100	V	
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	63	70	V	
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	90	100	V	
Maximum Average Forward Rectified Current 0.375" (9.5mm)Lead Length	I _{F(AV)}	3.0						A		
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	80						A		
Maximum Instantaneous Forward Voltage @ 3.0A	V _F	0.55		0.70		0.85		V		
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.5			0.6		mA	Ta=25°C		
		30			20		mA	Ta=100°C		
Typical Thermal Resistance	R _{th(j-a)}	40					°C/W	Note 1		
Typical Junction Capacitance	C _J	300		250		72		pF	Note 2	
Operation Junction Temperature Range	T _J	-55 to +125			-55 to +150			°C		
Storage Temperature Range	T _{STG}	-55 to +150					°C			

Note 1. Thermal Resistance from Junction to Ambient Vertical P.C. Board Mounting, 0.375"(9.5mm) Lead Length

Note 2. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.



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

Fig.1 Forward Current Derating Curve

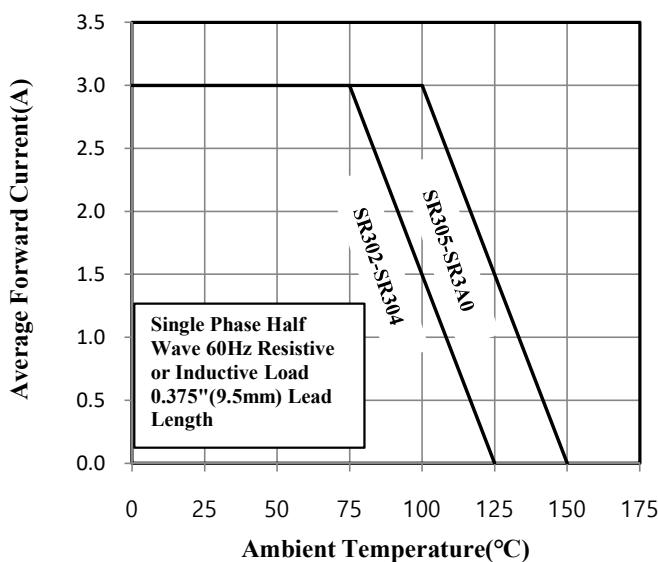


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

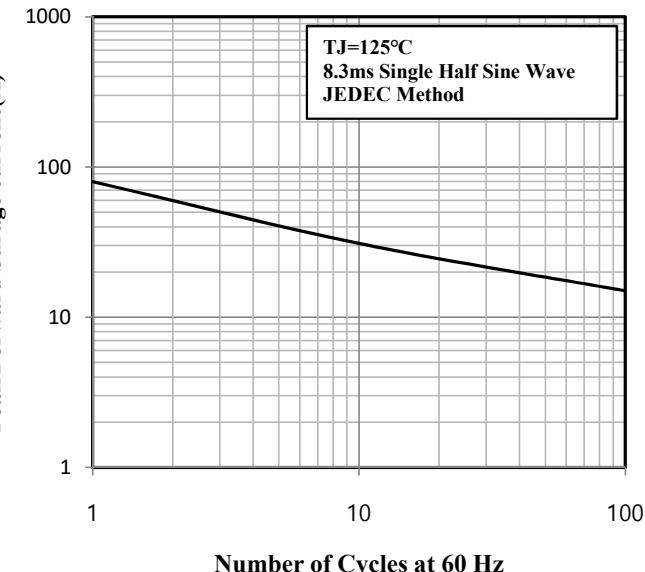


Fig.3 Typical Instantaneous Forward Characteristics

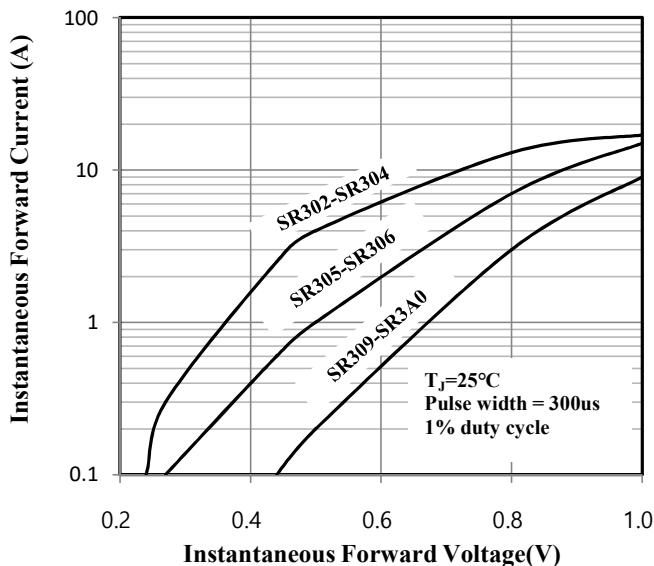


Fig.4 Typical Junction Capacitance

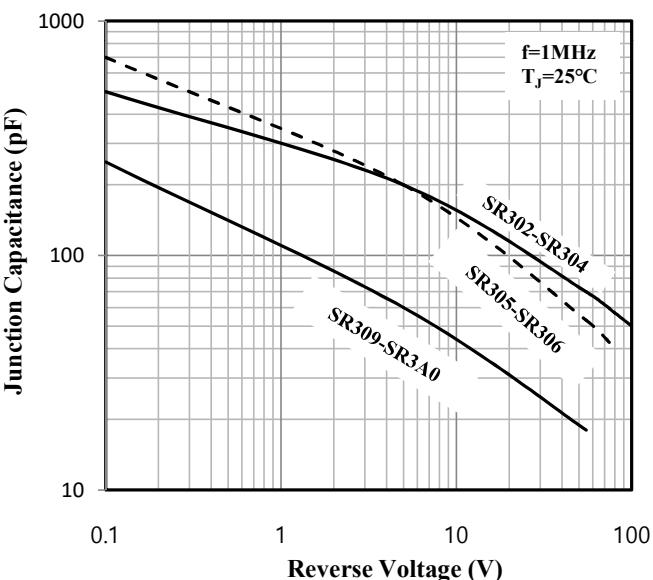


Fig.5 Typical Reverse Characteristics

