

Schottky Barrier Rectifier

Reverse Voltage 50 Volts Forward Current 5.0 Amperes

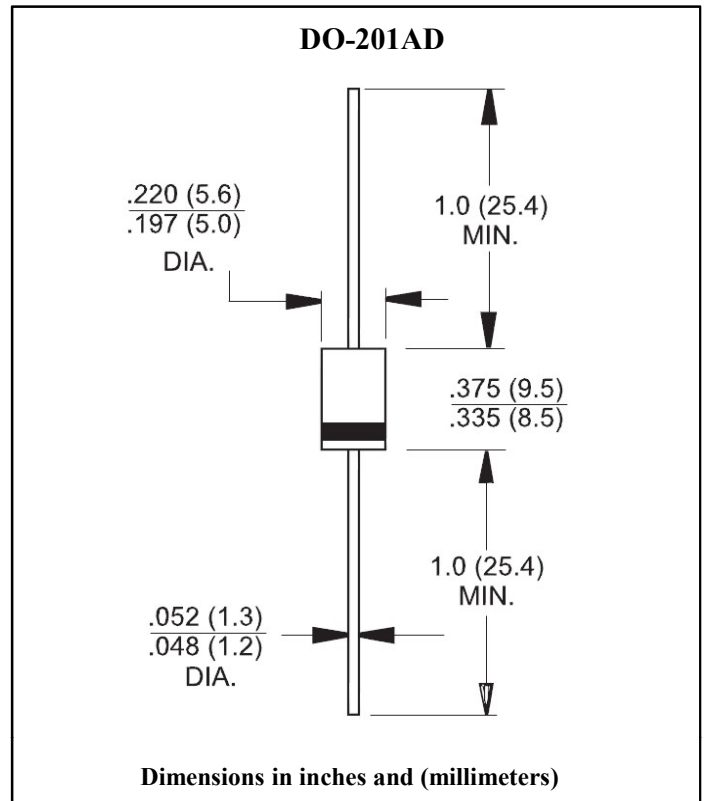
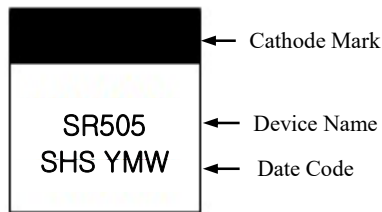
Features

- 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 : 1.1grams

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	Rated Value	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	V	
Maximum RMS Voltage	V_{RMS}	35	V	
Maximum DC Blocking Voltage	V_{DC}	50	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(JEDEC Method)	I_{FSM}	150	A	
Maximum Instantaneous Forward Voltage at 5.0A	V_F	0.70	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	380	pF	Note 1
Typical Thermal Resistance	$R_{th(j-a)}$	50	$^\circ C/W$	Note 2
	$R_{th(j-l)}$	10	$^\circ C/W$	
Operation Junction Temperature Range	T_J	-55 to +150	$^\circ C$	
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 0.375"(9.5mm) lead lengths, P.C.B mounted

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

Fig.1 Forward Current Derating Curve

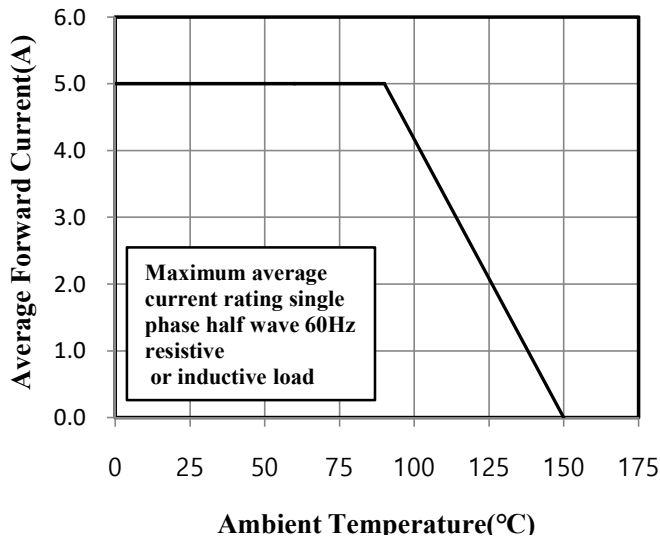


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

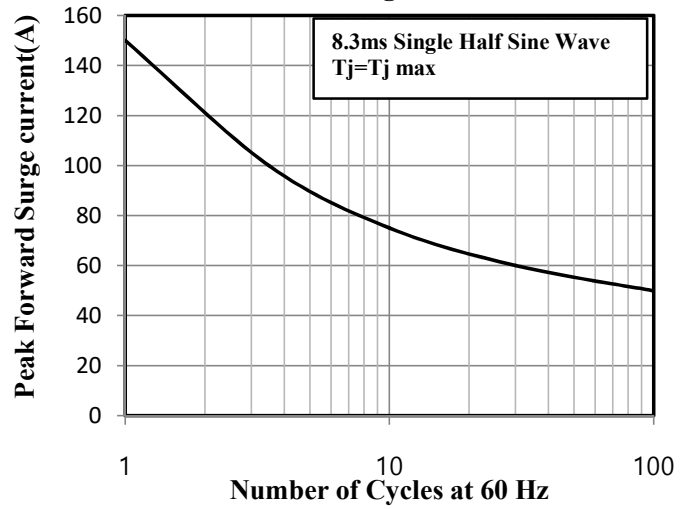


Fig.3 Typical Instantaneous Forward Characteristics

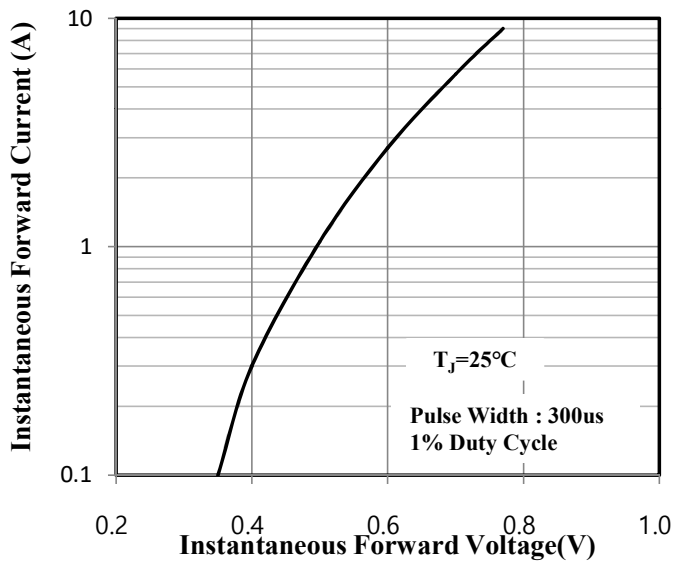


Fig.4 Typical Junction Capacitance

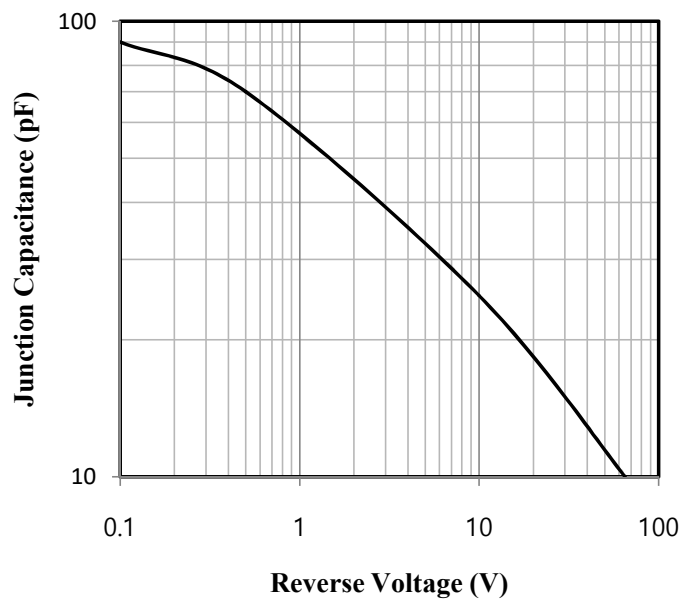


Fig.5 Typical Reverse Characteristics

