

SR5150H/SR5200H

PFC Device Corporation

5A 150V/200V Schottky Rectifier

Major ratings and characteristics

Characteristics	Values	Units	
I _{F(AV)} Rectangular	5	А	
Waveform	5		
V_{RRM}	150 to 200	V	
T _J Operating Junction	FF to 11F0	°C	
Temperature	-55 to +150		

Features

- Low Forward Voltage Drop
- Reliable High Temperature Operation
- Softest, fast switching capability
- 150°C Operating Junction Temperature
- Lead Free Finish, RoHS Compliant

DO-201AD Cathode Anode

Typical Applications

Device optimized for low forward voltage drop to maximize efficiency in Power Supply applications

1. Characteristics

Maximum Ratings Characteristics

(T_A = 25 °C unless otherwise specified)

Rating at 25C ambient temperature unless otherwise specified.

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

Parameter	Symbol	SR5150H	SR5200H	Units
Maximum DC blocking Voltage	V_{DC}			
Maximum Working Peak Reverse Voltage	V_{RWM}	150	200	Volts
Maximum Repetitive Peak Reverse Voltage	V_{RRM}			
Maximum RMS Voltage	V_{RMS}	105	140	Volts
Maximum Average Forward Rectified Current 0.375*(9.5mm)lead length (See Figure 1)	I _o	5		Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	120		Amps
Maximum instantaneous Forward Voltage at 5.0A	V _F	0.92	0.95	Volts
Maximum DC reserve current T _J =25 °C	I _R	0.5		mA
Maximum DC reserve current T _J =100 °C	I _R	10		mA
Typical Junction Capacitance (NOTE 1)	CJ	200		₽F
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	30		°C / W
Operating Junction Temperature Range	T _J	- 55 to +150		°c
Storage Junction Temperature	T _{STG}	- 55 to +150		

NOTE: 1. Measured at $1MH_Z$ and applied reverse voltage of 4.0V D.C.

NOTE: 2. Both leads attached to heatsink 20x20x1t (mm) copper plate at lead length 5mm.

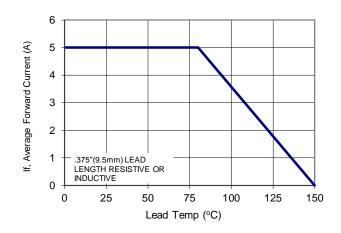


Version 4.1 2 / 5

2. Characteristics Curves

Ratings and Characteristics Curves

($TA = 25^{\circ}C$ unless otherwise specified)



120

(v) 90

60

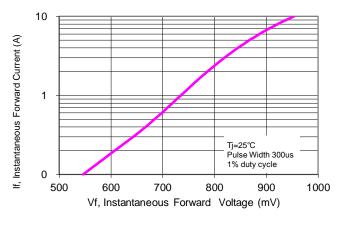
30

1 10 100

Number of Cycles at 60 Hz

Figure 1: Current Derating, Case

Figure 2: Maximum Repetitive Surge Current



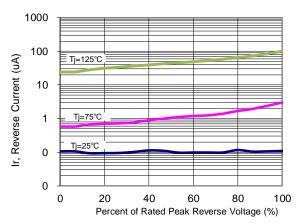


Figure 3: Typical Forward Voltage

Figure 4: Typical Reverse Current

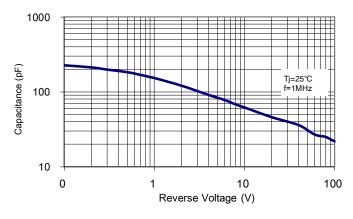


Figure 5: Typical Junction Capacitance



Version 4.1 3 / 5

3. Marking information

Top Marking Rule

SR5150

YYWWSH

SR5150 = Product Type Marking Code

YYWW = Date Code

YY = Last two digits of year

WW = Week code

S = Series Number

H = Halogen Free (N/A = common molding compound)



SR5200 = Product Type Marking Code

YYWW = Date Code

YY = Last two digits of year

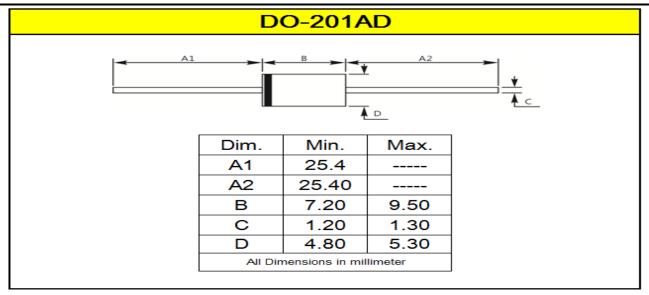
WW = Week code

S = Series Number

H = Halogen Free (N/A = common molding compound)

4. Package information

Package Outline Dimensions millimeters





Version 4.1 4 / 5

5. Ordering information

Part Number	Package	Delivery mode
SR5150H	DO-201AD	800 pieces / ammo-pack
SR5200H	DO-201AD	800 pieces / ammo-pack

Mechanical

Molder Plastic: UL Flammability Classification Rating 94V-0

■ Device Weight: 0.04 ounces (1.1 grams) – DO-201AD

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Version 4.1 5 / 5