SR540H/SR560H

PFC Device Corporation

5A 40V/60V Schottky Rectifier

Major ratings and characteristics

Characteristics	Values	Units
$I_{F(AV)}$ Rectangular Waveform	5	A
V_{RRM}	40 to 60	V
T_J Operating Junction Temperature	-55 to +125	^oC

SR540H/SR560H



DO-201AD



Features

- Low Forward Voltage Drop
- Reliable High Temperature Operation
- Softest, fast switching capability
- 125^{o}C Operating Junction Temperature
- Lead Free Finish, RoHS Compliant

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	SR540H	SR560H	Units
Maximum DC blocking Voltage	V_{DC}	40	60	Volts
Maximum Working Peak Reverse Voltage	V_{RWM}			
Maximum Repetitive Peak Reverse Voltage	V_{RRM}			
Maximum RMS Voltage	V_{RMS}	28	42	
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}	150		Amps
Maximum instantaneous Forward Voltage at I_o	V_F (3	0.55	0.7	Volts
Maximum DC reverse current T_J=25 °C	I_R (3	0.5		mA
Maximum DC reverse current T_J=100 °C	I_R (3	50		mA
Typical Junction Capacitance (NOTE 1)	C_J	200		pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	30		°C / W
Operating Junction Temperature Range	T_J	- 55 to +125	- 55 to +150	°C
Storage Junction Temperature	T_{STG}	- 55 to +150		

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

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

NOTE: 3. Pulse width < 300 uS, Duty cycle < 2%

2. Characteristics Curves

Ratings and Characteristics Curves (TA = 25℃ unless otherwise specified)

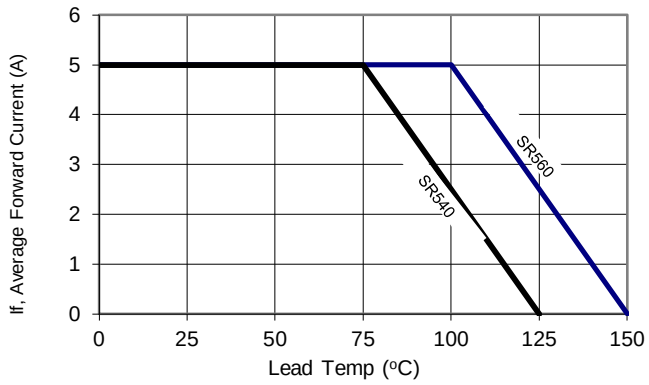


Figure 1: Current Derating, Case

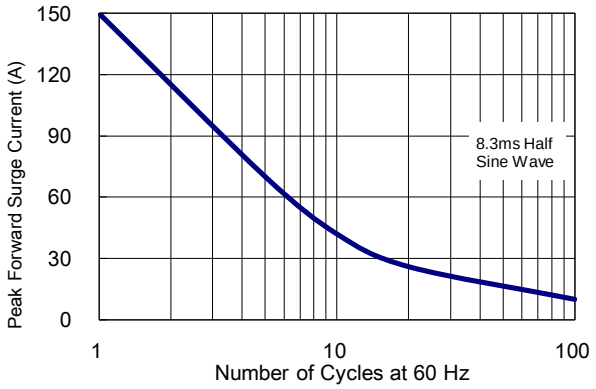


Figure 2: Maximum Repetitive Surge Current

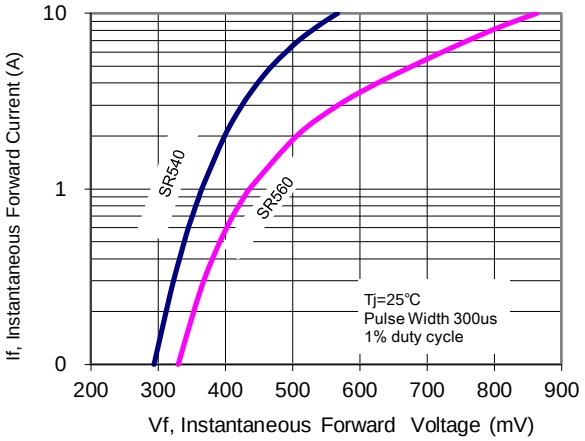


Figure 3: Typical Forward Voltage

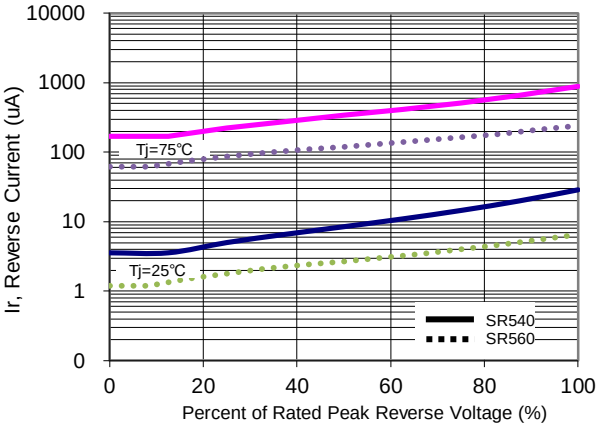


Figure 4: Typical Reverse Current

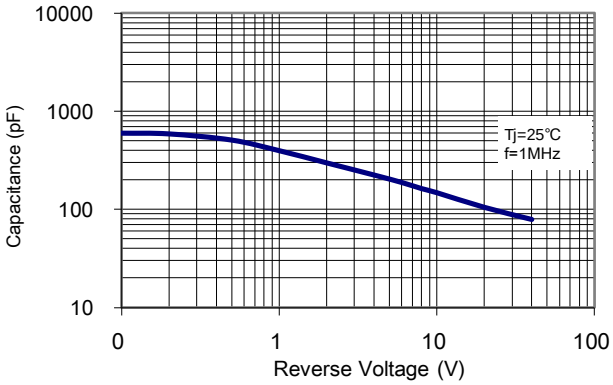
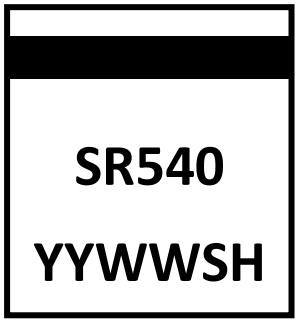


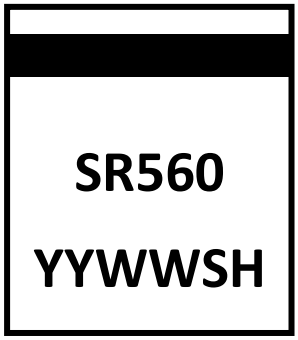
Figure 5: Typical Junction Capacitance

3. Marking information

Top Marking Rule



SR540 = Product Type Marking Code
YYWW = Date Code
YY = Last two digits of year
WW = Week code
S = Series Number
H = Halogen Free

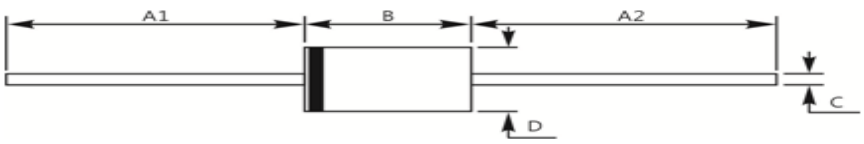


SR560 = Product Type Marking Code
YYWW = Date Code
YY = Last two digits of year
WW = Week code
S = Series Number
H = Halogen Free

4. Package information

Package Outline Dimensions millimeters

DO-201AD



Dim.	Min.	Max.
A1	25.4	-----
A2	25.40	-----
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in millimeter		

5. Ordering information

Part Number	Package	Delivery mode
SR540H	DO-201AD	800 pieces / ammo-pack
SR560H	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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