



PFC Device Corporation

**PFS560**

## 5A 60V MOS Schottky Rectifier

### Major ratings and characteristics

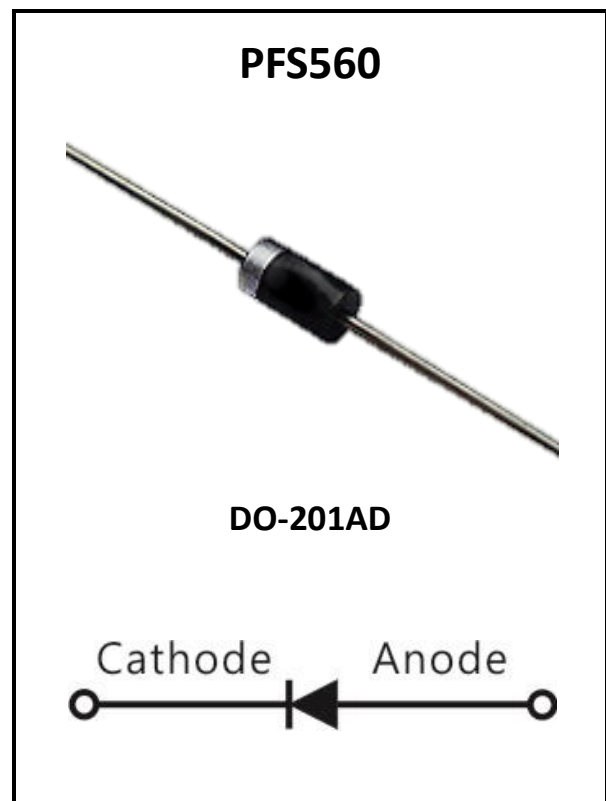
Characteristics	Values	Units
$I_{F(AV)}$ Rectangular Waveform	5	A
$V_{RRM}$	60	V
$V_F$ @ 5A, $T_j=125^\circ\text{C}$	0.62	V, typ.
$T_j$ Operating Junction Temperature	-65 to +150	$^\circ\text{C}$

### Features

- Low Forward Voltage Drop
- Reliable High Temperature Operation
- Softest, fast switching capability
- $150^\circ\text{C}$  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<sub>A</sub> = 25 °C unless otherwise specified )

Parameter	Symbol	Values	Units
DC Blocking Voltage	V <sub>RM</sub>	60	Volts
Working Peak Reverse Voltage	V <sub>RWM</sub>		
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>		
Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle	I <sub>o</sub>	5	Amps
Peak Forward Surge Current - 1/2 60hz	I <sub>FSM</sub>	100	Amps
Peak Repetitive Reverse Surge Current (2uS-1Khz)	I <sub>RRM</sub>	2	Amps
Typical Thermal Resistance	R <sub>θJC</sub>	20	°C / W
Maximum Rate of Voltage Change ( at Rated VR )	dv/dt	10000	V/uS
Operating Junction Temperature	T <sub>J</sub>	- 65 to +150	°C
Storage Junction Temperature	T <sub>STG</sub>	- 65 to +150	

### Electrical Characteristics ( T<sub>A</sub> = 25 °C unless otherwise specified )

Parameter	Test Conditions		Symbol	Typ.	Max.	Units
Instantaneous Forward Voltage	IF = 5 A	T <sub>J</sub> = 25 °C	VF*	----	0.67	Volts
		T <sub>J</sub> = 125 °C		0.62	0.66	
Instantaneous Reverse Current	At V <sub>RM</sub>	T <sub>J</sub> = 25 °C	IR*	----	500	uA
		T <sub>J</sub> = 125 °C		----	100	mA

\* Pulse width < 300 uS, Duty cycle < 2%



2. Characteristics Curves

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

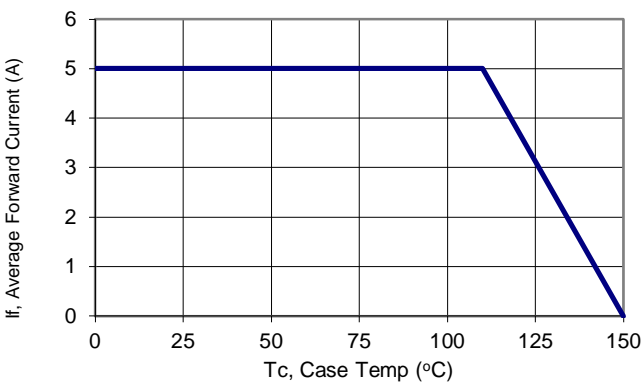


Figure 1: Current Derating, Case

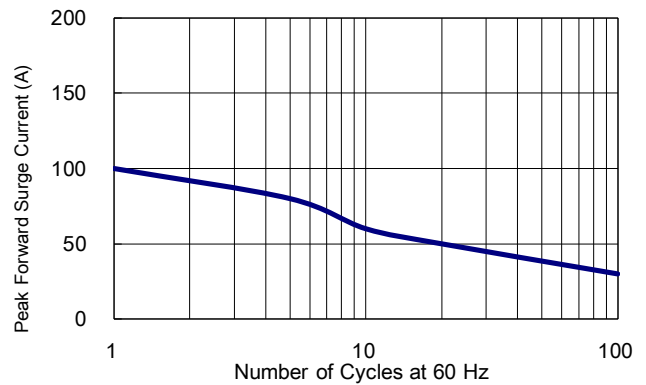


Figure 2: Maximum Repetitive Surge Current

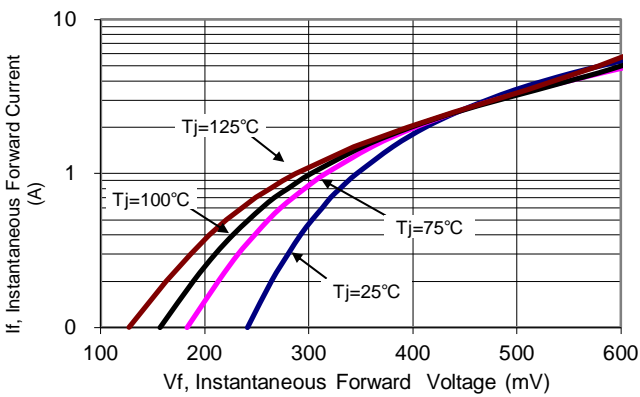


Figure 3: Typical Forward Voltage

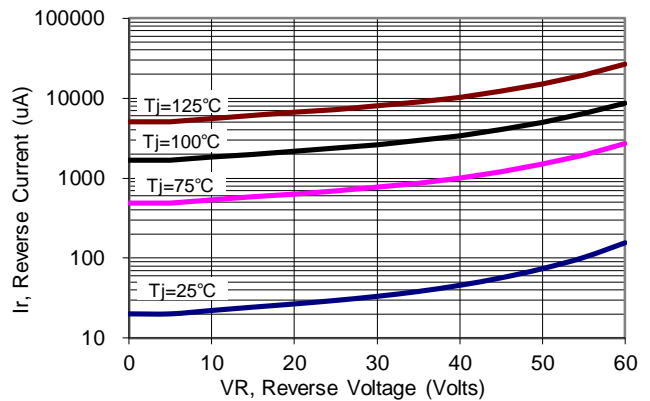


Figure 4: Typical Reverse Current

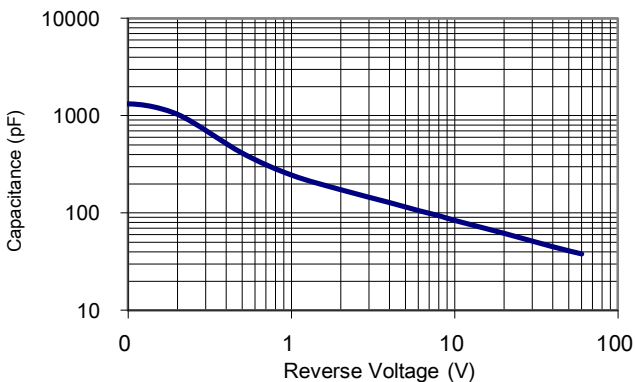
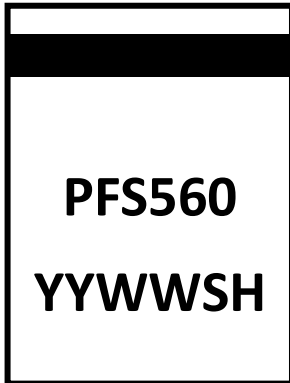


Figure 5: Typical Junction Capacitance



**3. Marking information**

**Top Marking Rule**



PFS560 = 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**

**DO-201AD**

Dim.	Min.	Max.
A1	25.4 typ.	
A2	25.4 typ.	
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
PFS560	DO-201AD	800 pieces / ammo-pack

Note: For Halogen Free molding compound, add "H" suffix to part number above.

#### Mechanical

- Molder Plastic: UL Flammability Classification Rating 94V-0
- Device Weight : 0.04 ounces (1.1 grams) – DO-201AD

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