



the following features are made possible in a single device:

Major ratings and characteristics

Characteristics	Values	Units
$I_{F(AV)}$ Rectangular Waveform	5	A
V_{RRM}	100	V
$V_F@5A, T_j=125^{\circ}C$	0.58	V, typ
T_j (operating)	-65 to 150	$^{\circ}C$

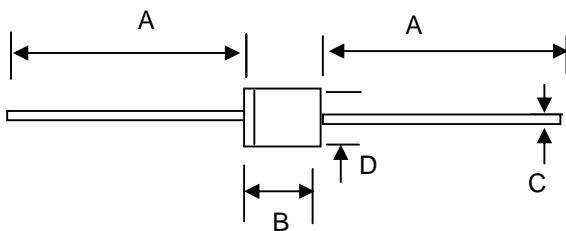
Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications

ELECTRICAL:

- * Ultra Low Forward Voltage Drop
- * Reliable High Temperature Operation
- * Softest, fast switching capability
- * $150^{\circ}C$ Operating Junction Temperature
- * Lead Free Finish, RoHS Compliant

MECHANICAL:

- * Molded Plastic DO-201AD



DO-201AD		
Dim.	Min.	Max.
A	25.4	-
B	7.3	9.5
C	1.2	1.3
D	4.8	5.3
All Dimensions in mm		



Maximum Ratings and Electrical Characteristics (at 25°C unless otherwise specified)				
	SYMBOL			UNITS
DC Blocking Voltage Working Peak Reverse Voltage Peak Repetitive Reverse Voltage	V_{RM} V_{RWM} V_{RRM}	100		Volts
Average Rectified Forward Current (Rated V_R -20Khz Square Wave) - 50% duty cycle	I_O	5		Amps
Peak Forward Surge Current - 1/2 60hz	I_{FSM}	150		Amps
Peak Repetitive Reverse Surge Current (2uS-1Khz)	I_{RRM}	2		Amps
Instantaneous Forward Voltage (per leg) $I_F = 5A; T_J = 25^\circ C$ $I_F = 5A; T_J = 125^\circ C$	V_F^*	Typ --- ---	Max 0.70 0.63	Volts
Maximum Instantaneous Reverse Current at Rated V_{RM} $T_J = 25^\circ C$ $T_J = 125^\circ C$	I_R	Typ --- ---	Max 0.2 40	mA mA
Maximum Rate of Voltage Change (at Rated V_R)	dv/dt	10,000		V/uS
Typical Thermal Resistance Junction to Ambient $R_{\theta JA}$	$R_{\theta JA}$	22		°C/W
Operating Junction Temperature	T_J	-65 to +150		°C
Storage Junction Temperature	T_{STG}	-65 to +150		°C

NOTE: Dice are available for customer applications.

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

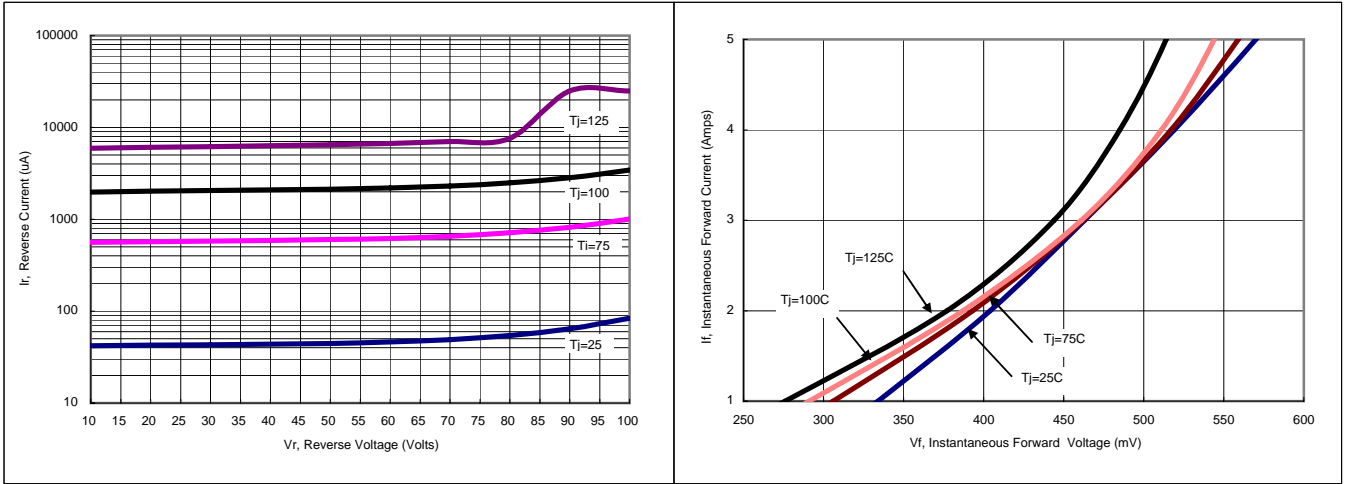


Figure 1: Typical Reverse Current

Figure 2: Typical Forward Voltage

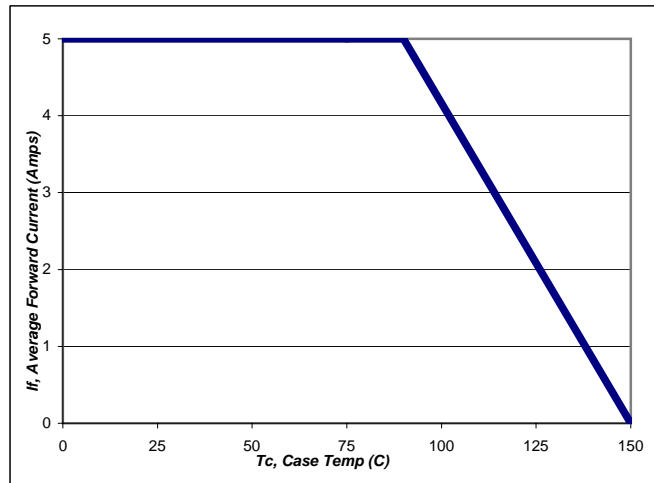


Figure 3: Current Derating, Case

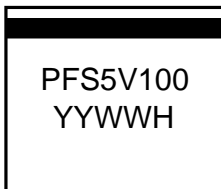


Ordering information

Part Number	Case	Packaging
PFS5V100	DO-201AD	800 pieces / ammo-pack
PFS5V100H	DO-201AD	800 pieces / ammo-pack

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

Marking information



- PFS5V100 = Product Type Marking Code
- YYWW = Date Code
- YY = Last two digits of year
- WW = Week code
- H = Halogen Free (N/A = common molding compound)

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