



## PS200R~PS2010R

#### **FAST SWITCHING PLASTIC RECTIFIER**

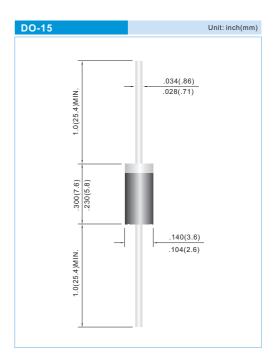
VOLTAGE 50 to 1000 Volt CURRENT 2.0 Amperes

### **FEATURES**

- · High current capability.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- · Low leakage.
- Exceeds environmental standards of MIL-S-19500/228
- · Fast switching for high efficiency.
- Lead free in compliance with EU RoHS 2011/65/EU directive

#### **MECHANICAL DATA**

- · Case: Molded plastic, DO-15
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- · Polarity: Color Band denotes cathode end
- Mounting Position: Any
- Weight: 0.014 ounce, 0.397 gram



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	PS200R	PS201R	PS202R	PS204R	PS206R	PS208R	PS2010R	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current .375"(9.5mm) lead length at $T_A$ =55°C	I <sub>F(AV)</sub>	2.0							А
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	70							Α
Maximum Forward Voltage at 2.0A	V <sub>F</sub>	1.3						V	
Maximum DC Reverse Current T <sub>J</sub> =25°C at Rated DC Blocking Voltage T <sub>J</sub> =100°C	I <sub>R</sub>	5.0 500							μΑ
Maximum Reverse Recovery Time (Note 1)	t <sub>rr</sub>	150			250	500		ns	
Typical Junction capacitance (Note 2)	C	35							pF
Typical Thermal Resistance (Note 3)	R <sub>eJA</sub>	40							°C /
Operating Junction and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150							°C

NOTES:1. Reverse Recovery Test Conditions:  $I_F$ =.5A,  $I_R$ =1A,  $I_{ff}$ =.25A

- 2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
- 3. Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length with both leads equally heatsink.





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#### **RATING AND CHARACTERISTIC CURVES**

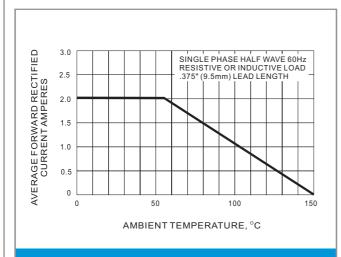


FIG.1 FORWARD CURRENT DERATING CURVE

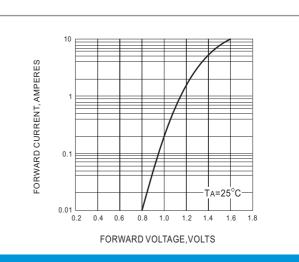


FIG.2 TYPICAL FORWARD CHARACTERISTICS

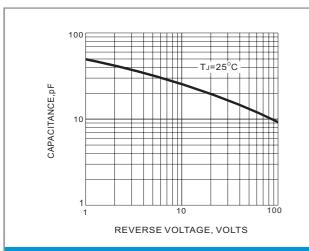


FIG.3 TYPICAL JUNCTION CAPACITANCE

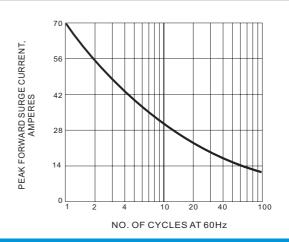
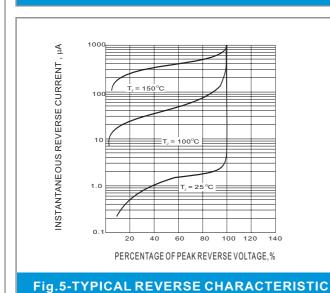


FIG.4 MAX NON-REPETITIVE SURGE CURRENT







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## Part No\_packing code\_Version

PS200R\_AY\_00001

PS200R\_AY\_10001

PS200R\_B0\_00001

PS200R\_B0\_10001

PS200R\_R2\_00001

PS200R\_R2\_10001

### For example:



Packing Code XX					Version Code XXXXX				
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code			
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number			
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number			
Bulk Packing (B/P)	В	13"	2						
Tube Packing (T/P)	Т	26mm	X						
Tape and Reel (Right Oriented) (TRR)	s	52mm	Y						
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U						
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D						





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