



#### **GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIERS**

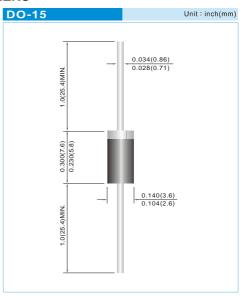
# VOLTAGE 50 to 1000 Volt CURRENT 2 Ampere

#### **FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- · Glass passivated junction
- 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
- 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		PG200R	PG201R	PG202R	PG204R	PG206R	PG208R	PG2010R	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	٧
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 0.375"(9.5mm) lead length at T <sub>A</sub> =55°C	I <sub>F(AV)</sub>	2					А		
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	70					Α		
Maximum Forward Voltage at 2A	V <sub>F</sub>	1.3						V	
Maximum DC Reverse Current at Rated DC Blocking $T_J$ =25°C Voltage $T_J$ =100°C	I <sub>R</sub>	1 150						μА	
Maximum Reverse Recovery Time (Note 1)	t <sub>rr</sub>	150 250 500			000	ns			
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	35					pF		
Typical Thermal Resistance (Note 3)	R <sub>eJA</sub>	40				°C / W			
Operating Junction and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150					°C		

NOTES:1. Reverse recovery test conditions:  $I_F$ =0.5A,  $I_R$ =1A,  $I_{rr}$ =0.25A

- 2. Measured at 1 MHz and applied reverse voltage of 4 VDC
- 3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

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

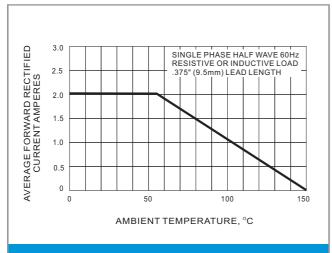


FIG.1 FORWARD CURRENT DERATING CURVE

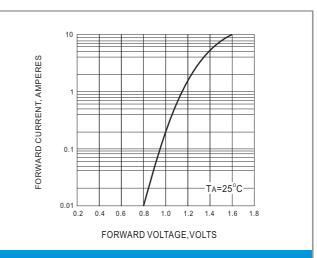


FIG.2 TYPICAL FORWARD CHARACTERISTICS

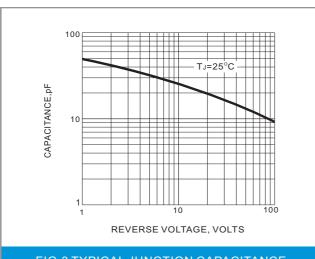


FIG.3 TYPICAL JUNCTION CAPACITANCE

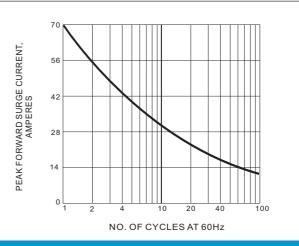


FIG.4 MAX NON-REPETITIVE SURGE CURRENT

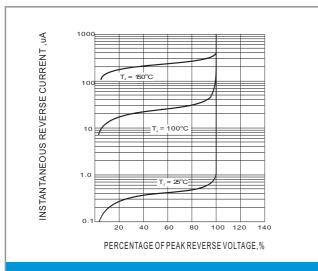


Fig.5-TYPICAL REVERSE CHARACTERISTIC

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### Part No\_packing code\_Version

PG200R\_AY\_00001

PG200R\_AY\_10001

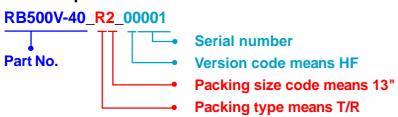
PG200R\_B0\_00001

PG200R\_B0\_10001

PG200R\_R2\_00001

PG200R\_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	1st 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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