



### **GLASS PASSIVATED JUNCTION FAST RECOVERY RECTIFIERS**

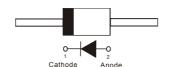
## VOLTAGE 50 to 1000 Volt CURRENT 1 Ampere

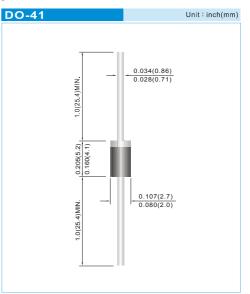
#### **FEATURES**

- · High current capability.
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- · Low leakage.
- · Fast switching for high efficiency.
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)

#### **MECHANICAL DATA**

- · Case: Molded plastic, DO-41
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.0118 ounce, 0.336 gram





#### **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

PARAMETER	SYMBOL	PG100R	PG101R	PG102R	PG104R	PG106R	PG108R	PG1010R	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	٧
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current 0.375"(9.5mm) ead length at T <sub>A</sub> =55°C						А			
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	30						А	
Maximum Forward Voltage at 1A	V <sub>F</sub>	1.3						V	
Maximum DC Reverse Current at at Rated DC T <sub>J</sub> =25°C Blocking Voltage T <sub>J</sub> =100°C	I <sub>R</sub>	1 100						μА	
Typical Junction Capacitance (Note 1)	C	12					pF		
Maximum Reverse Recovery Time	t <sub>rr</sub>	150 250 500			ns				
Typical Thermal Resistance	R <sub>eJA</sub>	67					°C /		
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150					°C		

NOTES:1. Reverse recovery test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>rr</sub>=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





### **RATING AND CHARACTERISTIC CURVES**

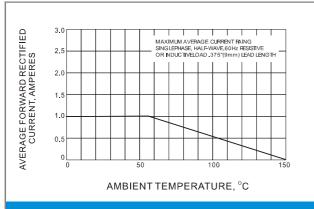


Fig.1 FORWARD CURRENT DERATING CURVE

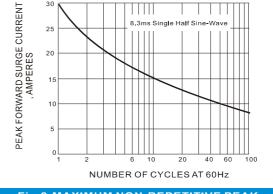


Fig.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

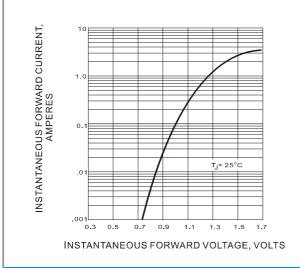


Fig.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

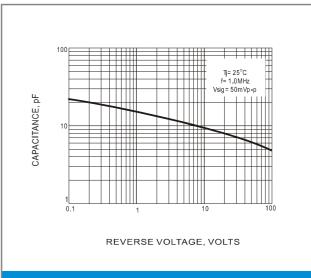


Fig.4 TYPICAL JUNCTION CAPACITANCE

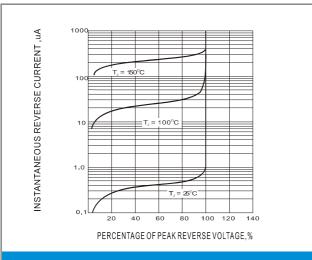


Fig.5-TYPICAL REVERSE CHARACTERISTIC





### Part No\_packing code\_Version

PG100R\_AY\_00001

PG100R\_AY\_10001

PG100R\_B0\_00001

PG100R\_B0\_10001

PG100R\_R2\_00001

PG100R\_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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