Technical Data *Green Products*
Data Sheet N0544, Rev. -

1N4001G THRU 1N4007G
1.0A GLASS PASSIVATED RECTIFIER

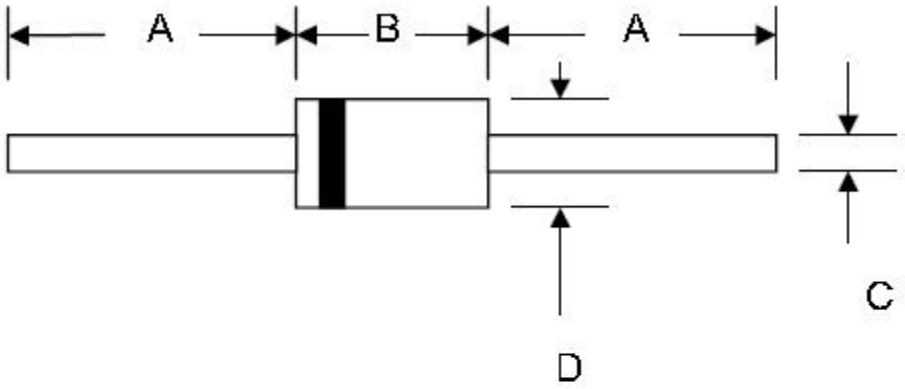
Features:

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- This is a Pb − Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical data:

- Case: Molded Plastic
- Terminals: Plated Leads Solderable Per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.35 grams(Approx)
- Mounting Position: Any

Mechanical Dimensions: In mm/Inches



DO-41				
Dim	Min	Max	Min	Max
A	25.4	—	1.000	—
B	4.06	5.21	0.159	0.205
C	0.71	0.864	0.028	0.034
D	2.00	2.72	0.079	0.107
	In mm		In inch	

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Marking Diagram:

Where XXXXX is YYWWL

1N4001G = Part Name
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information

Device	Package	Shipping
1N4001G-1N4007G	DO-41 (Pb-Free)	5000pcs / tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Type Number	Symbol	1N 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average forward rectified output current @T_A = 75°C	I_O	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Forward Voltage @I_F =1.0A	V_{FM}	1.0							V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	5.0 50							μA
Typical Junction Capacitance (Note 2)	C_J	8							pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	100							°C/W
Operating Junction Temperature Range	T_J	-65 to +175							°C
Storage Temperature Range	T_{STG}	-65 to +175							°C

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm form the case.
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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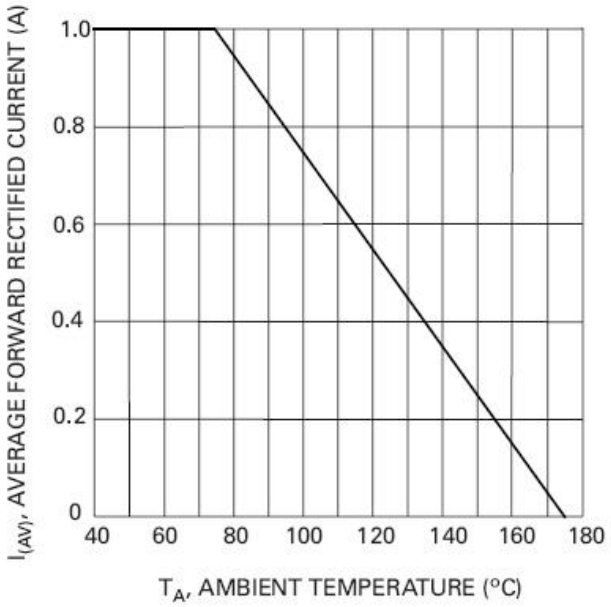

Fig. 1 Forward Current Derating Curve

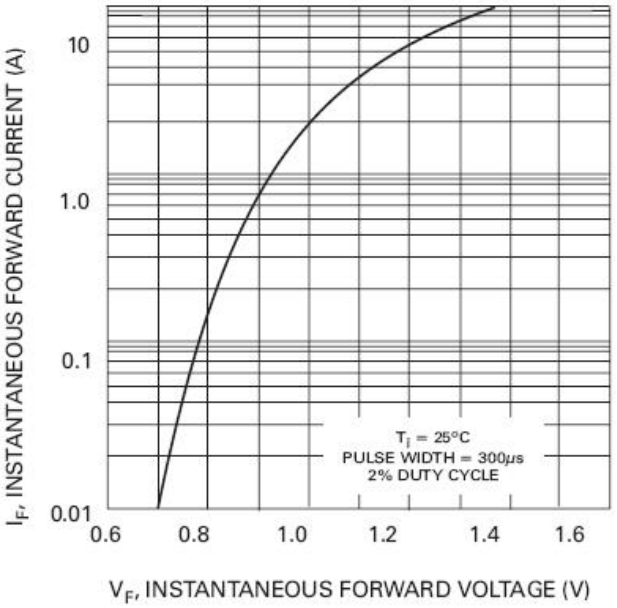

Fig. 2 Typical Forward Characteristics

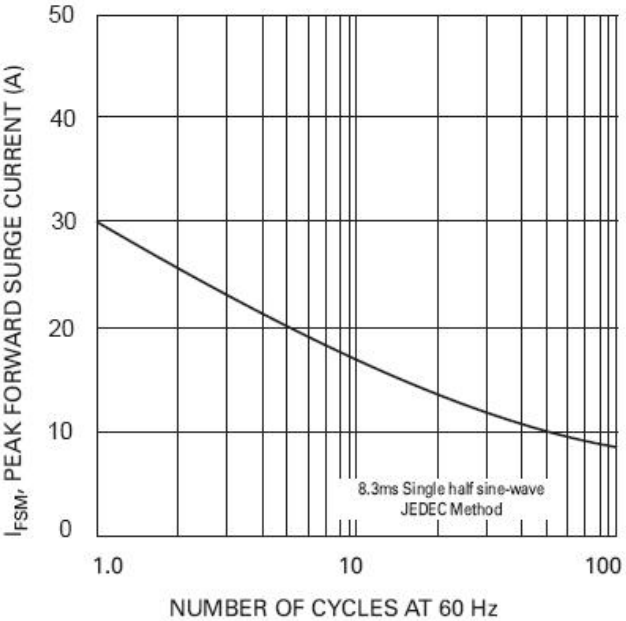

Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

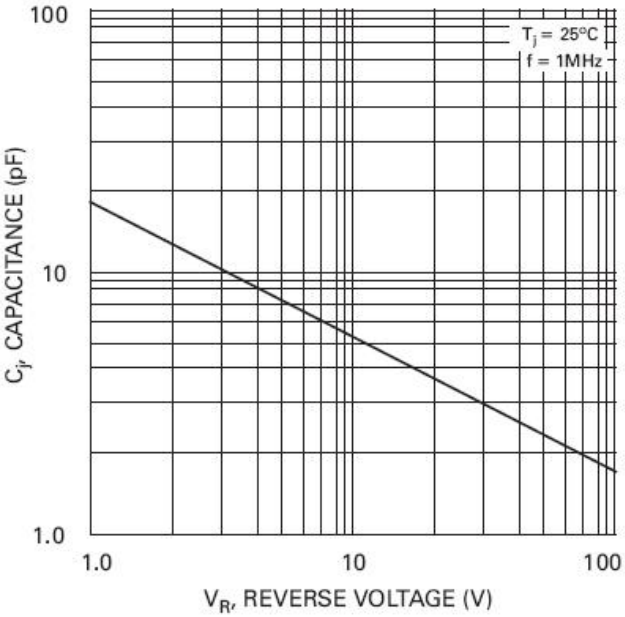

Fig. 4 Typical Junction Capacitance

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