Technical Data
Data Sheet N0544, Rev. A

RoHS Pb

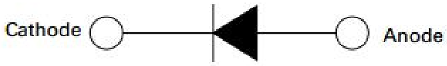
1N4001G THRU 1N4007G
1.0A GLASS PASSIVATED RECTIFIER

DO-41

Features

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

Circuit Diagram



Mechanical Data

- Case: molded plastic
- Terminals: Plated leads, solderable per MIL-STD-202, Method 208
- Polarity: Cathode band
- Mounting Position: Any
- Weight:0.34 grams(approx)

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	Units
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 from the case
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings and Characteristics Curves

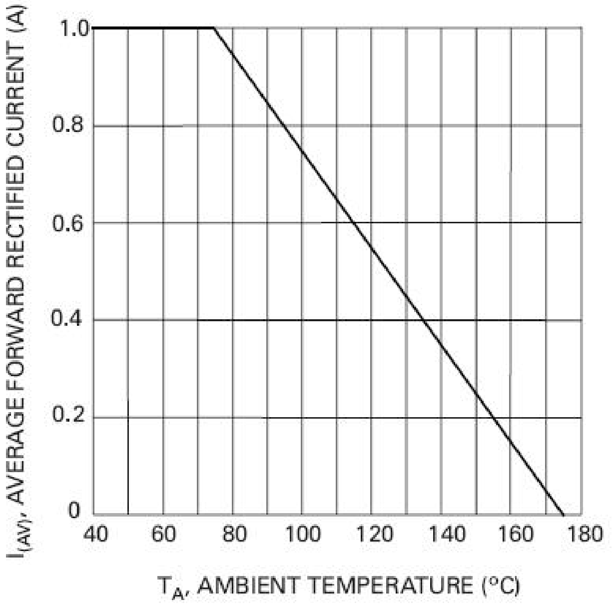


Fig. 1 Forward Current Derating Curve

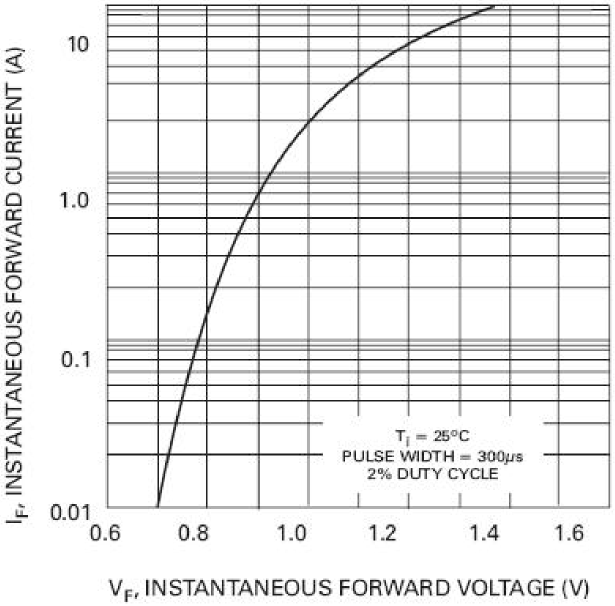


Fig. 2 Typical Forward Characteristics

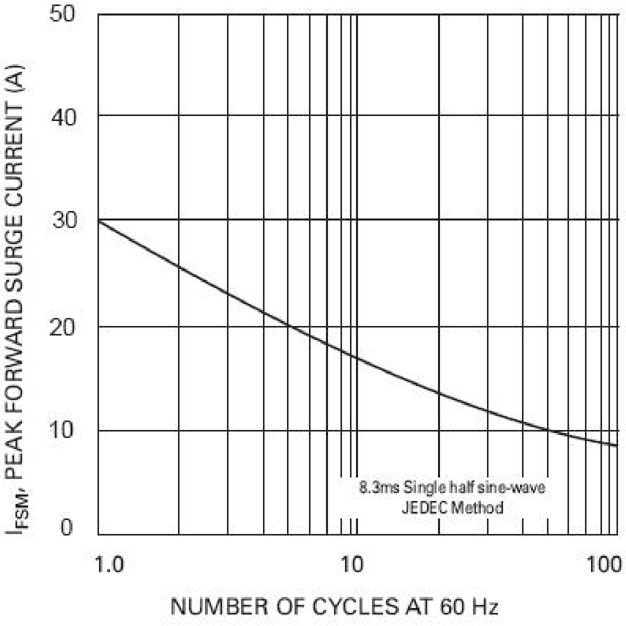


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

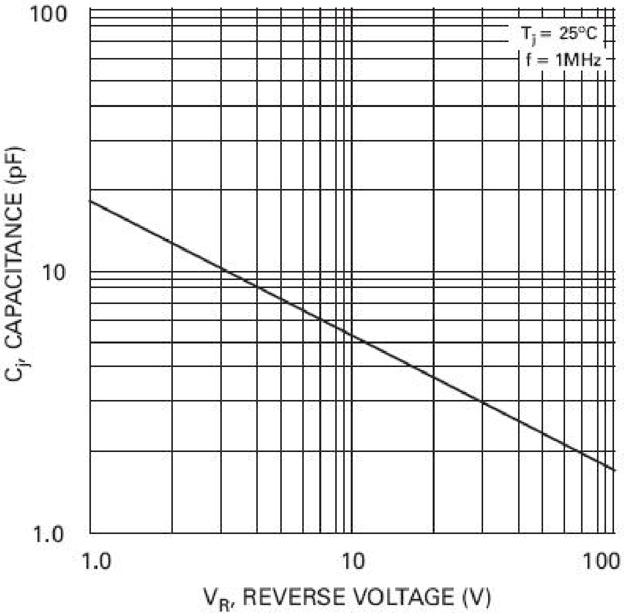
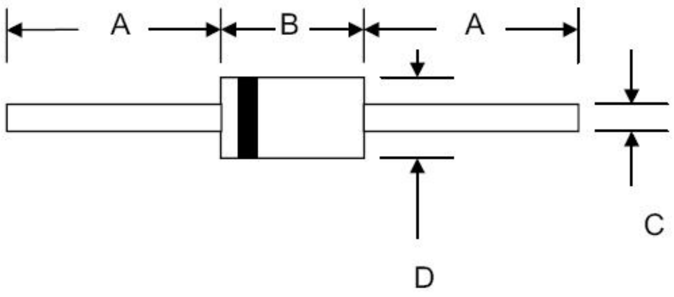


Fig. 4 Typical Junction Capacitance

Mechanical Dimensions DO-41



SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.4	-	1.000	-
B	4.06	5.21	0.160	0.205
C	0.71	0.864	0.028	0.034
D	2.00	2.72	0.079	0.107

Ordering Information

Device	Package	Shipping
1N4001G-1N4007G	DO-41 (Pb-Free)	5000pcs / Tape
1N4001GTA-1N4007GTA	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.

Marking Diagram

1N4001G

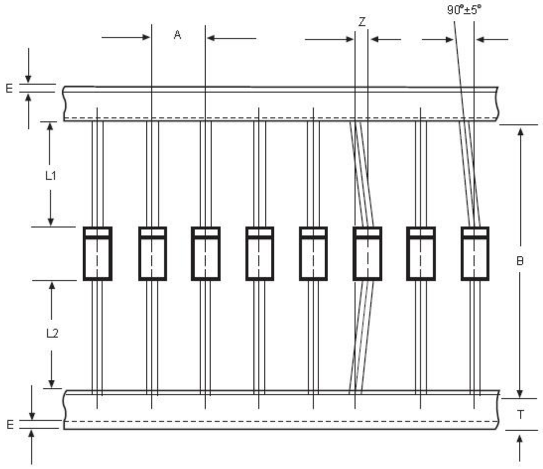
1N4001G-HF

Where XXXXX is YYWWL

1N4001G = Type Number
SSG = SSG
HF = Halogen Free
YY = Year
WW = Week
L = Lot Number

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

Carrier Tape Specification DO-41



SYMBOL	Millimeters	
	Min.	Max.
A	4.50	5.50
B	50.9	53.9
Z	-	1.20
T	5.60	6.40
E	-	0.80
IL1-L2I	-	1.0

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