

## FEATURES

- Low reverse leakage
- High forward surge capability
- High reliability
- Meet AEC-Q101 Requirements



DO-41

## MECHANICAL DATA

- Case:DO-41 Molded plastic
- Polarity Symbol Marking On Body
- Mounting Position : Any

## APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

## MAXIMUM RATINGS AND CHARACTERISTICS (T<sub>A</sub>=25°C)

Parameter		Symbol	1N4001GQ	1N4002GQ	1N4003GQ	1N4004GQ	1N4005GQ	1N4006GQ	1N4007GQ	Unit
Marking			1N4001G	1N4002G	1N4003G	1N4004G	1N4005G	1N4006G	1N4007G	
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	
Maximum DC Blocking Voltage		V <sub>DC</sub>	50	100	200	400	600	800	1000	
Maximum average forward rectified current		I <sub>F(AV)</sub>	1.0							A
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave		I <sub>FSM</sub>	30.0							
Maximum Forward Voltage at I <sub>F</sub> =1.0A		V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>A</sub> =25°C	I <sub>R</sub>	5							μA
	T <sub>A</sub> =125°C		100							
Type junction capacitance V <sub>C</sub> =4.0V,f=1MHz		C <sub>J</sub>	30							pF
Typical thermal resistance (Note 1)		R <sub>θJA</sub>	65							°C/W
Operating Junction And Storage Temperature Range		T <sub>J</sub> , T <sub>STG</sub>	-55~+150							°C

Note:

- Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted

# CHARACTERISTIC CURVES

Fig.1 Typical Forward Characteristic

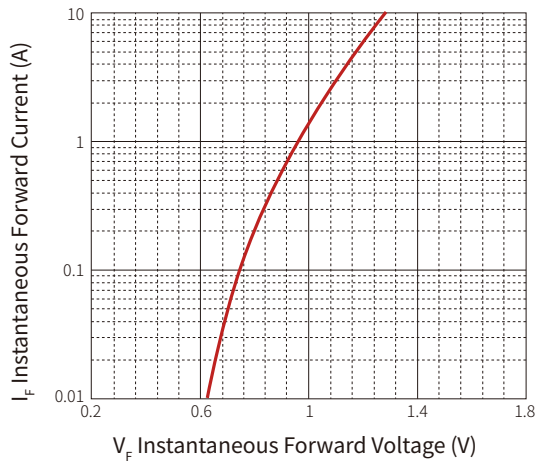


Fig.2 Forward Current Derating Curve

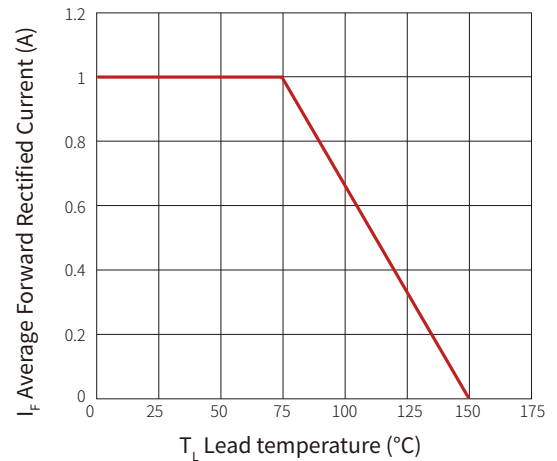


Fig.3 Maximum Non Repetitive Peak Forward Surge Current

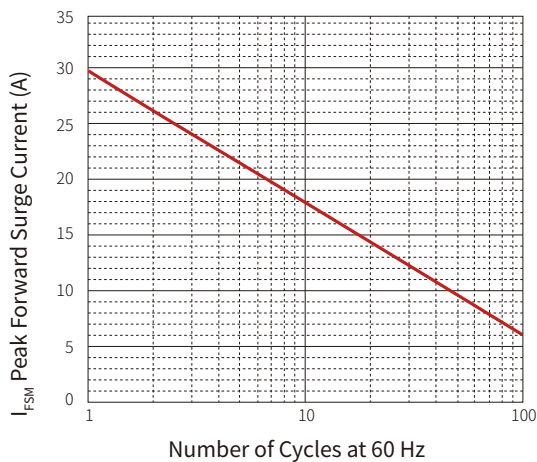
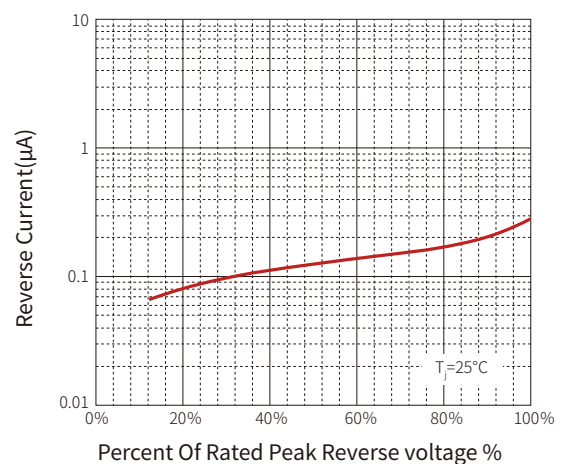
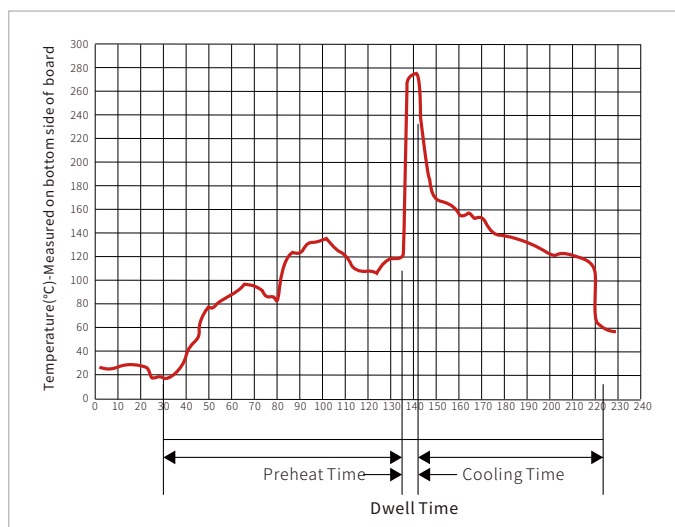


Fig.4 Typical Reverse Characteristics

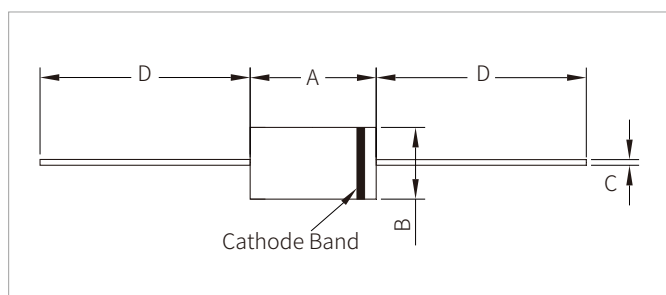


## WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

## DO-41 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.10	5.20	0.160	0.205
B	2.00	2.70	0.080	0.107
C	0.71	0.86	0.028	0.034
D	25.40	-	1.000	-

## ORDERING INFORMATION

Part Number	Component Package	Per Carton	Description
1N4001GQ-1N4007GQ	DO-41	5000pcs	Box

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