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_A=25°C)

Parameter		Symbol	1N 4001GQ	1N 4002GQ	1N 4003GQ	1N 4004GQ	1N 4005GQ	1N 4006GQ	1N 4007GQ	Unit
Marking			1N 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	
Maximum average forward rectified curren		$I_{F(AV)}$	1.0							A
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave		I_{FSM}	30.0							
Maximum Forward Voltage at I_F=1.0A		V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25°C	I_R	5							μA
	T_A=125°C		100							
Type junction capacitance V_C=4.0V,f=1MHz		C_J	30							pF
Typical thermal resistance (Note 1)		$R_{\theta JA}$	65							°C/W
Operating Junction And Storage Temperature Range		T_j,T_{STG}	-55~+150							°C

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

CHARACTERISTIC CURVES

Fig.1 Typical Forward Characteristic

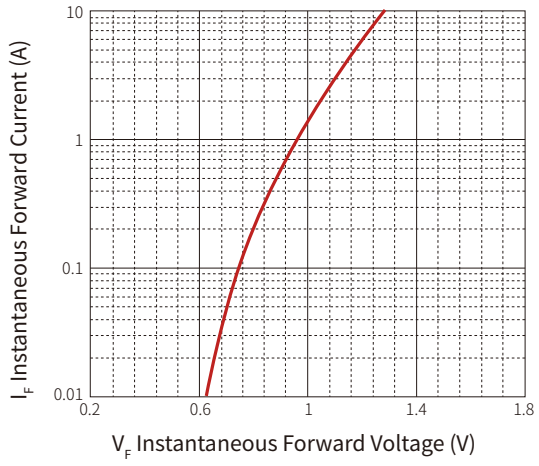


Fig.2 Forward Current Derating Curve

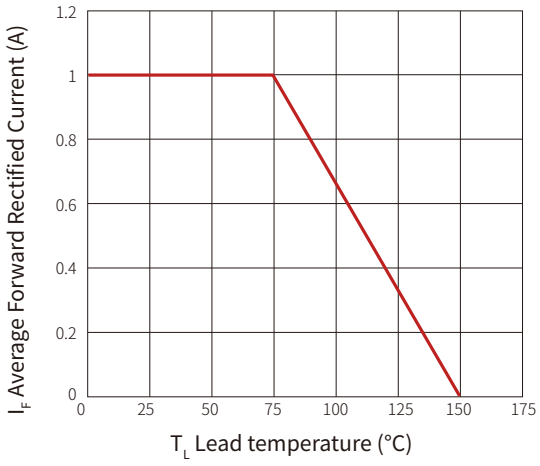


Fig.3 Maximum Non Repetitive Peak Forward Surge Current

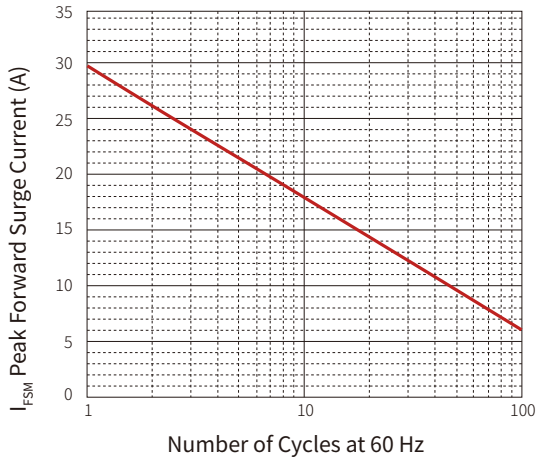
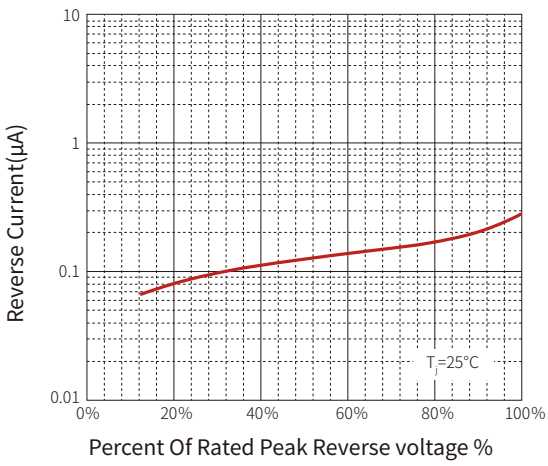
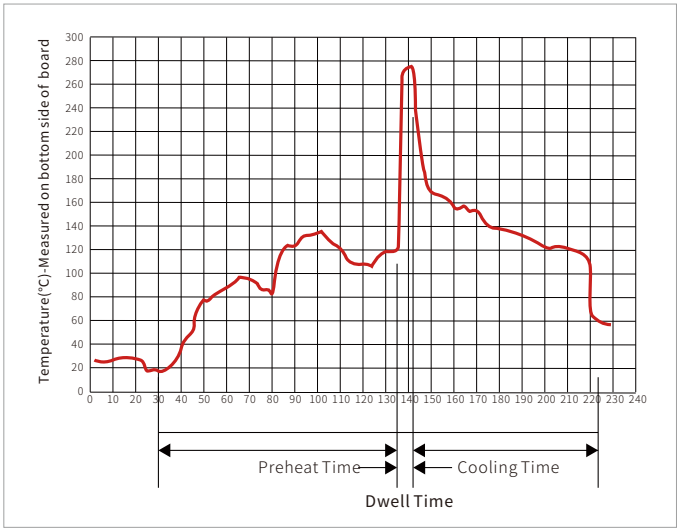


Fig.4 Typical Reverse Characteristics

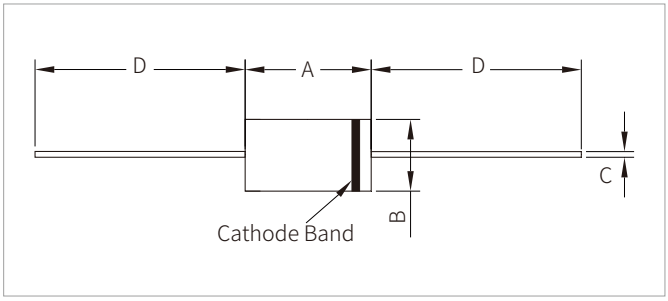


WAVE SOLDERING



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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No.3387 Shendu Road
Pujiang I&E Park
Minhang Shanghai China
201000

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