

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	1N4001GQ	1N4002GQ	1N4003GQ	1N4004GQ	1N4005GQ	1N4006GQ	1N4007GQ	Unit
Marking		1N4001GQ	1N4002GQ	1N4003GQ	1N4004GQ	1N4005GQ	1N4006GQ	1N4007GQ	
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 current	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	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 _{θJA}	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

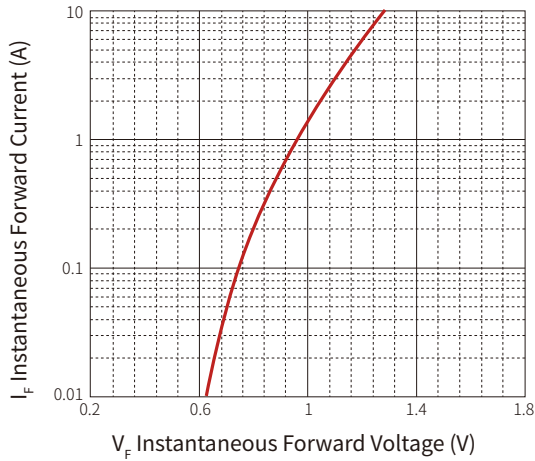


Fig.2 Forward Current Derating Curve

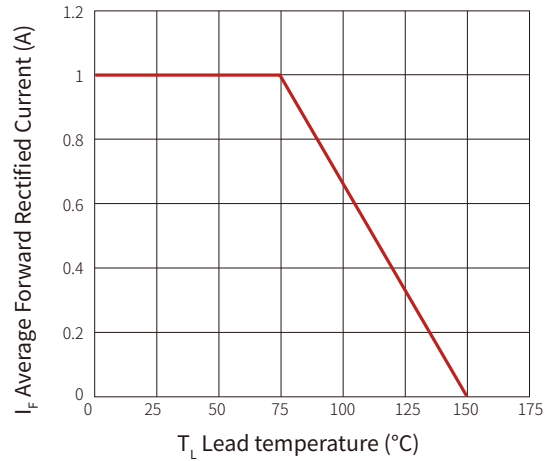


Fig.3 Maximum Non Repetitive Peak Forward Surge Current

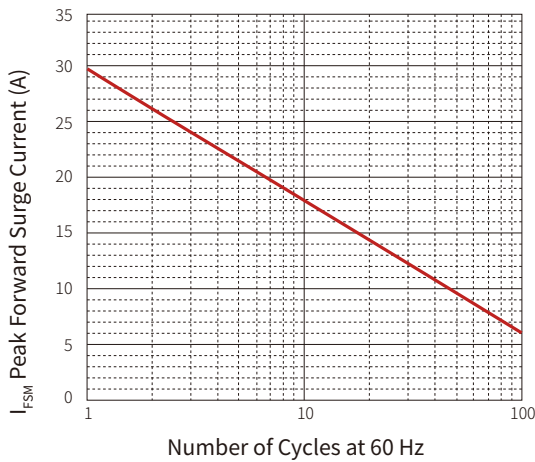
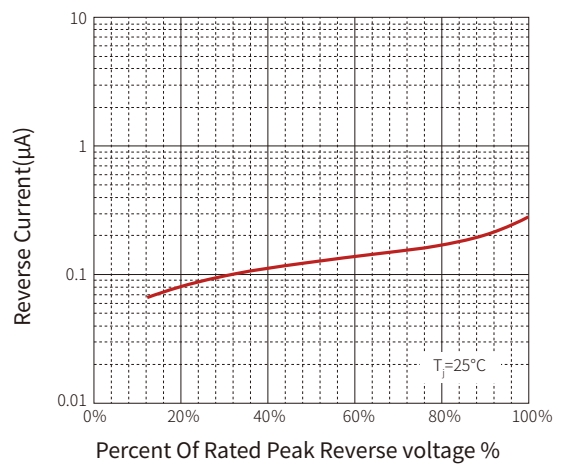
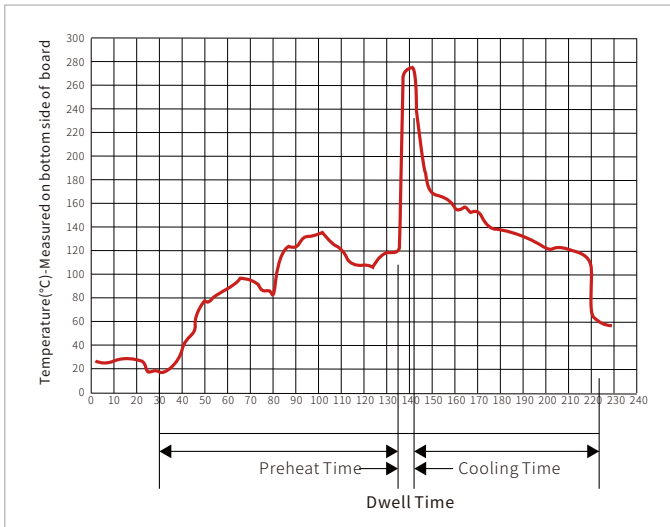


Fig.4 Typical Reverse Characteristics

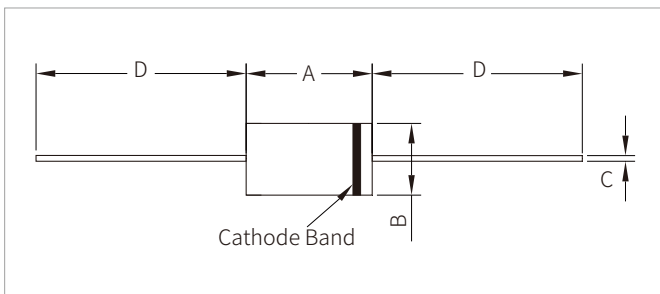


WAVE SOLDERING



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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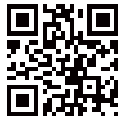
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