

FEATURES

- | Low Reverse Leakage
- | High Forward Surge Capability
- | High Reliability
- | Meet AEC-Q101 Requirements



DO-41

MECHANICAL DATA

- | Case: DO-41 Molded Plastic
- | Epoxy: UL 94V-0 Rate Flame Retardant
- | Lead: Pure Tin Plated, Lead Free

APPROVALS

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

MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

Parameter		Symbol	UF4001 G-Q	UF4002 G-Q	UF4003 G-Q	UF4004 G-Q	UF4005 G-Q	UF4006 G-Q	UF4007 G-Q	Unit
Marking			UF4001	UF4002	UF4003	UF4004	UF4005	UF4006	UF4007	
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 8.3ms Single Half Sine-Wave		I _{FSM}	30							
Maximum Forward Voltage @I _F =1.0A		V _F	1.00			1.3	1.70			V
Maximum Reverse Current @V _{DC}	T _A =25°C	I _R	5							μA
	T _A =125°C		100							
MAX. Reverse Recovery Time I _F =0.5A , I _R =1.0A ,I _{RR} =0.25A		T _{RR}	75							ns
Typical Junction Capacitance V _R =4.0V,f=1MHz		C _J	17							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

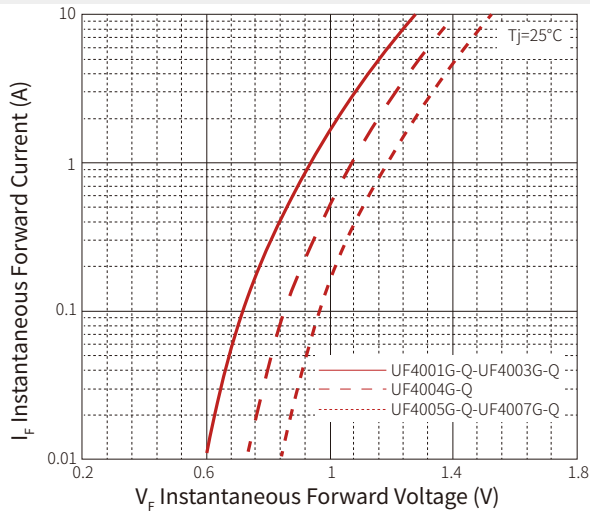


Fig.2 Forward Current Derating Curve

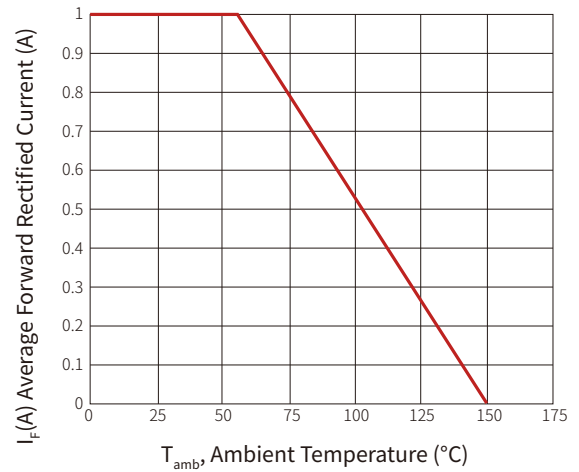


Fig.3 Maximum Non Repetitive Peak Forward Surge Current

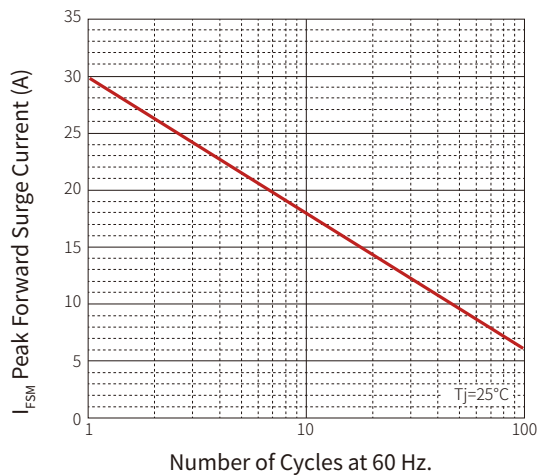
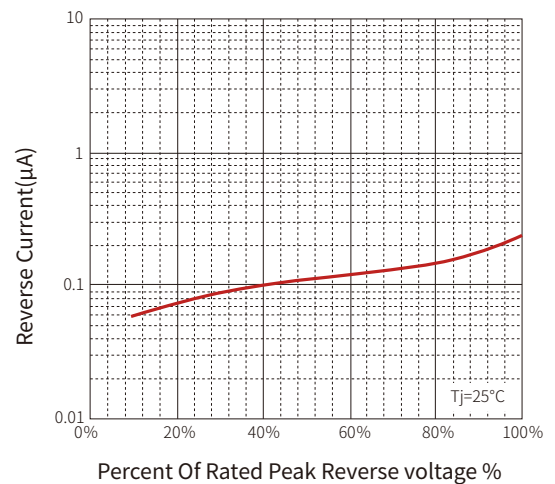
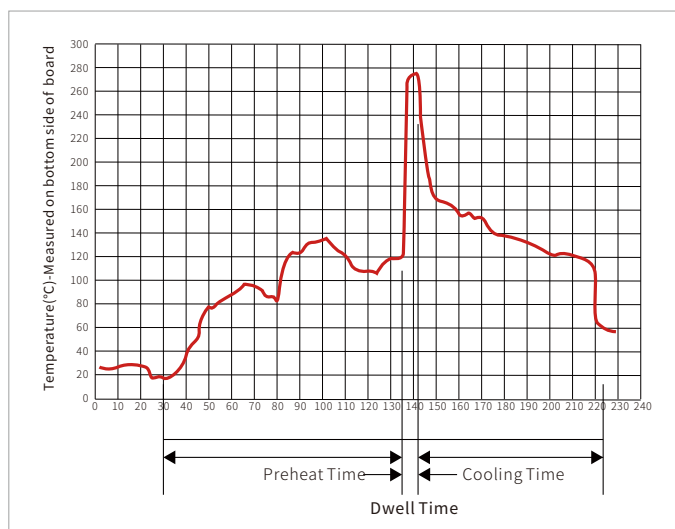


Fig.4 Typical Reverse Characteristics

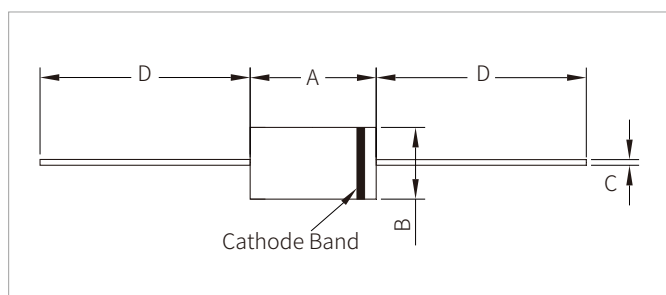


WAVE SOLDERING



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
UF4001G-Q~UF4007G-Q	DO-41	5000pcs	Box

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By QR Code

Website



Wechat

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