

FEATURES

- | Plastic package has Underwriters Laboratory
Flammability Classification 94V-O utilizing
Flame Retardant Epoxy Molding Compound
- | Ultra Fast switching for high efficiency



DO-41

MECHANICAL DATA

- | Case : Molded plastic body
- | Polarity: Band denotes cathode
- | 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	UF4001	UF4002	UF4003	UF4004	UF4005	UF4006	UF4007	Unit
Marking		UF4001	UF4002	UF4003	UF4004	UF4005	UF4006	UF4007	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	
Maximum Average Forward Current 0.375" (9.5mm) lead length at T _A =55°C	I _{F(AV)}	1							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30							
Maximum Forward Voltage at I _F =1 A	V _F	1			1.3		1.7		V
Maximum DC reverse current at rated DC blocking voltage	T _J =25°C	10							μA
	T _J =100°C	500							
Typical Junction capacitance (Note 1)	C _J	17							pF
Typical Thermal Resistance(Note 2)	R _{θJA}	60							°C/W
Maximum Reverse Recovery Time (Note 3)	t _{rr}	50				75			ns
Operating junction and storage temperature range	T _J , T _{STG}	-55~+150							°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4 VDC.
2. Thermal Resistance from Junction to Ambient and from Junction to lead length 0.375" (9.5mm) P.C.B. mounted.
3. Reverse Recovery Time I_F=0.5A, I_R=1A, I_{rr}=0.25A

CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

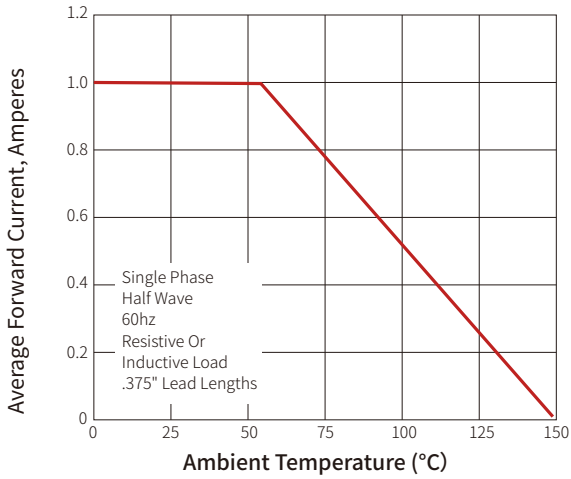


Fig.2 Peak Forward Surge Current

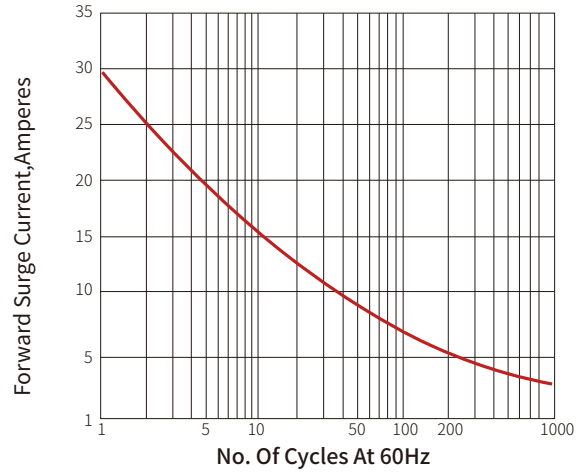


Fig.3 Forward Characteristics

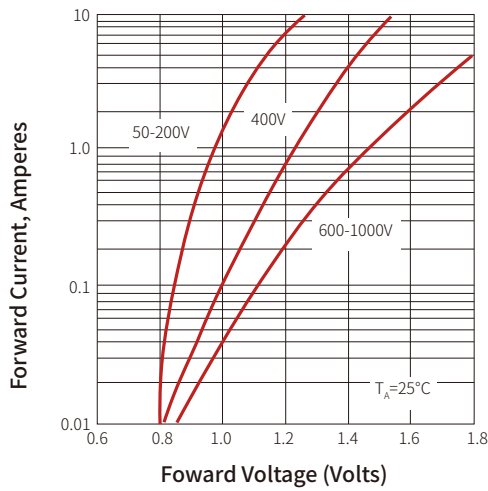


Fig.4 Typical Reverse Characteristics

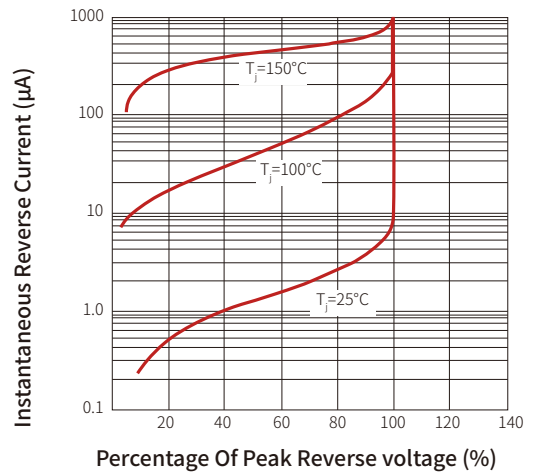
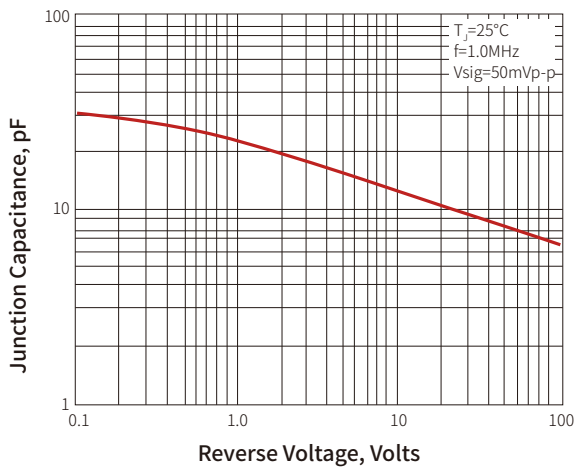
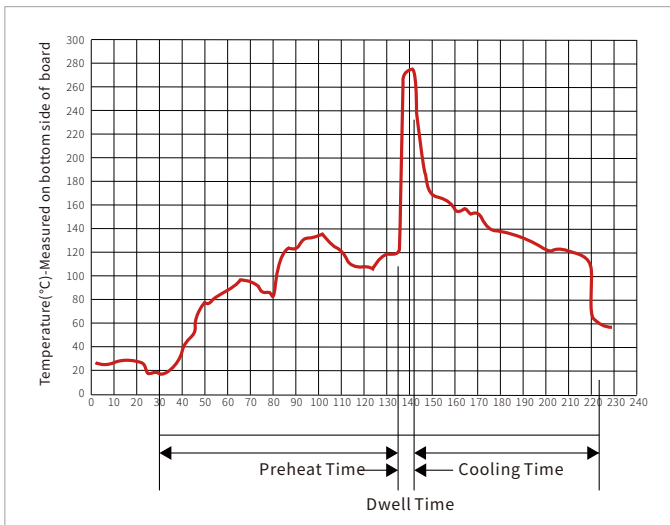


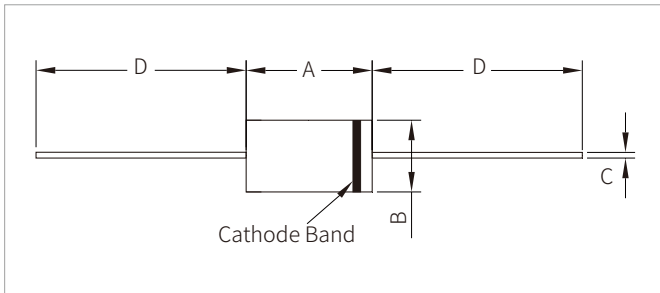
Fig.5 Typical Junction Capacitance


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
UF4001-UF4007	DO-41	5000pcs	Box

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By QR Code

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