

# UF1010G-AU

## GLASS PASSIVATED JUNCTION ULTRAFAST RECOVERY RECTIFIER

<b>VOLTAGE</b>	<b>1000 Volt</b>	<b>CURRENT</b>	<b>1 Ampere</b>
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**DO-41** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Ultra Fast recovery for high efficiency.
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2011/65/EU directive

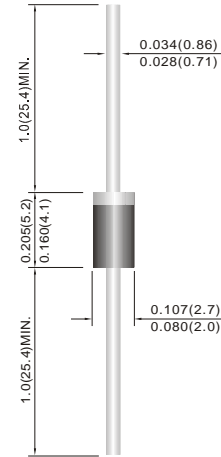
### MECHANICAL DATA

Case: Molded plastic, DO-41

Terminals: Axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Weight: 0.0118 ounce, 0.336 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS Voltage	$V_{RMS}$	700	V
Maximum DC Blocking Voltage	$V_{DC}$	1000	V
Maximum Average Forward Current 0.375"(9.5mm) lead length at $T_A=55^{\circ}C$	$I_{F(AV)}$	1	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	30	A
Maximum Forward Voltage at 1A	$V_F$	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	$I_R$	1 150	$\mu A$
Typical Junction Capacitance (Note 1)	$C_J$	17	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	60	$^{\circ}C / W$
Maximum Reverse Recovery Time (Note 3)	$t_{rr}$	100	ns
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^{\circ}C$

### 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  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$

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## RATING AND CHARACTERISTIC CURVES

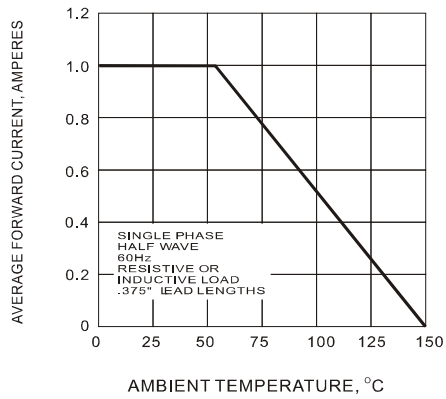


Fig.1 FORWARD CURRENT DERATING CURVE

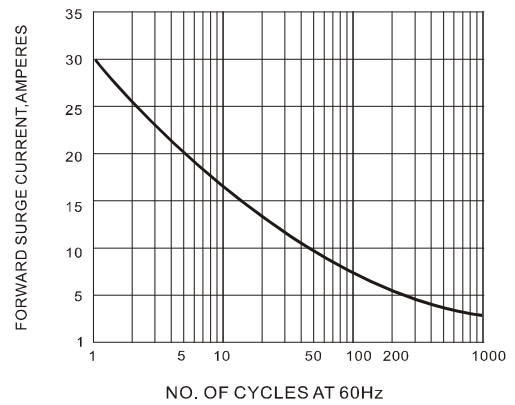


Fig.2 PEAK FORWARD SURGE CURRENT

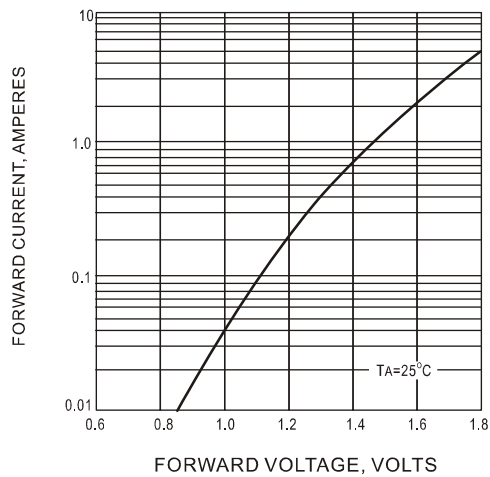


Fig.3 FORWARD CHARACTERISTICS

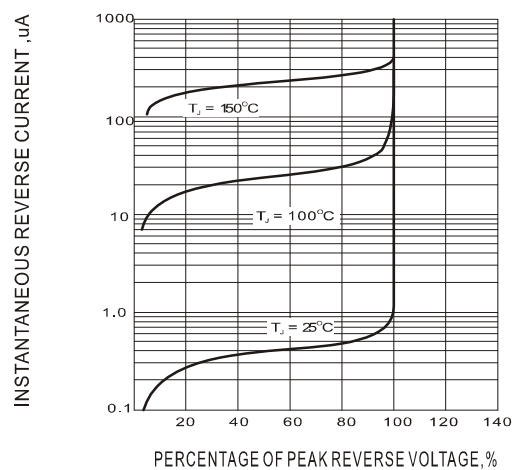


Fig.4-TYPICAL REVERSE CHARACTERISTIC

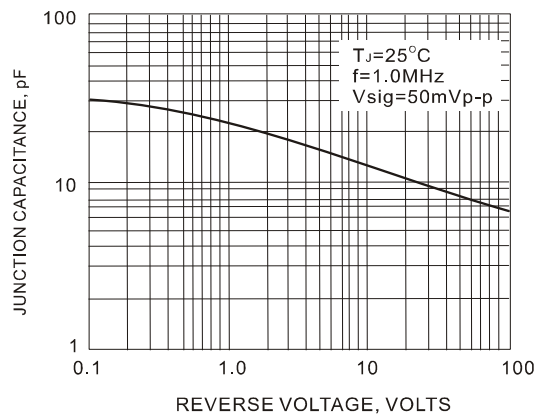


Fig.5 TYPICAL JUNCTION CAPACITANCE

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### Part No\_packing code\_Version

UF1010G-AU\_AY\_000A1

UF1010G-AU\_AY\_100A1

UF1010G-AU\_B0\_000A1

UF1010G-AU\_B0\_100A1

UF1010G-AU\_R2\_000A1

UF1010G-AU\_R2\_100A1

For example :

RB500V-40\_R2\_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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