



# UF100G SERIES

## GLASS PASSIVATED JUNCTION ULTRAFAST RECOVERY RECTIFIER

**VOLTAGE** 50 to 1000 Volt **CURRENT** 1.0 Amperes

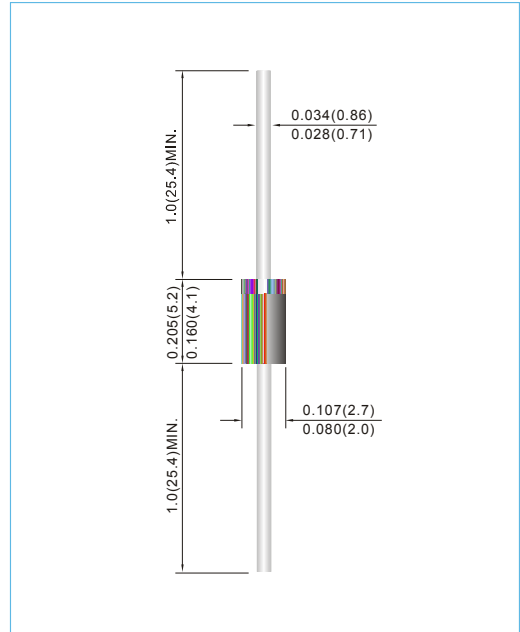
**DO-41** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228.
- Ultra Fast recovery for high efficiency.
- 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: Band denotes cathode  
 Mounting Position: Any  
 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	UF100G	UF101G	UF102G	UF104G	UF106G	UF108G	UF1010G	UNITS	
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	V	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V	
Maximum Average Forward Current .375"(9.5mm) lead length at $T_A=55^{\circ}C$	$I_{F(AV)}$	1.0							A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	30							A	
Maximum Forward Voltage at 1.0A	$V_F$	1.0		1.3		1.7			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	$I_R$	1.0			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)	$t_{rr}$	50				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 4.0 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  $I_F=.5A$  ,  $I_R=1A$  ,  $I_{rr}=.25A$



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## RATING AND CHARACTERISTIC CURVES

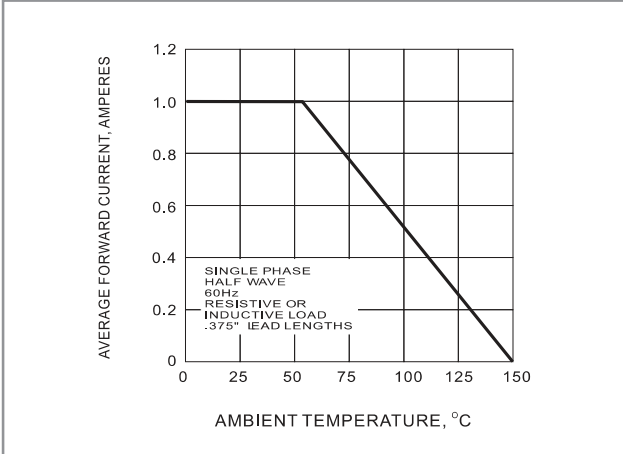


Fig.1 FORWARD CURRENT DERATING CURVE

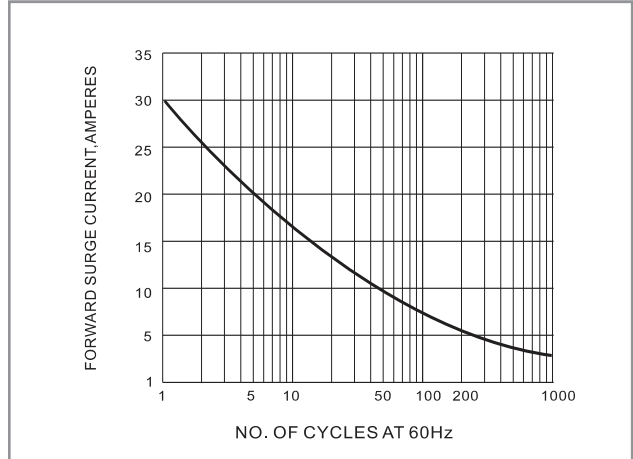


Fig.2 PEAK FORWARD SURGE CURRENT

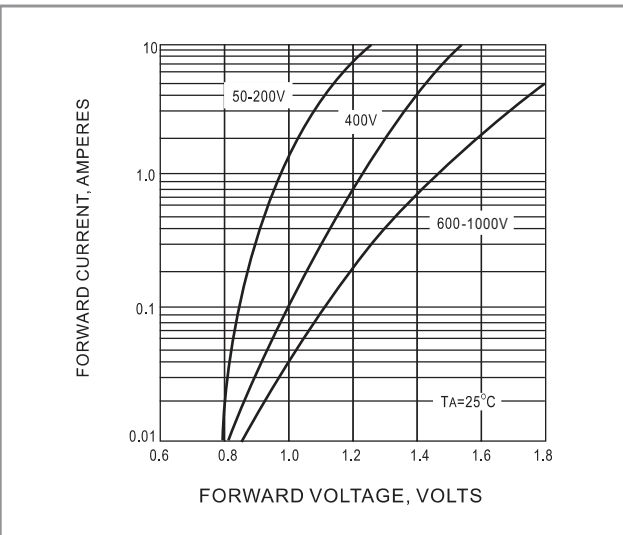


Fig.3 FORWARD CHARACTERISTICS

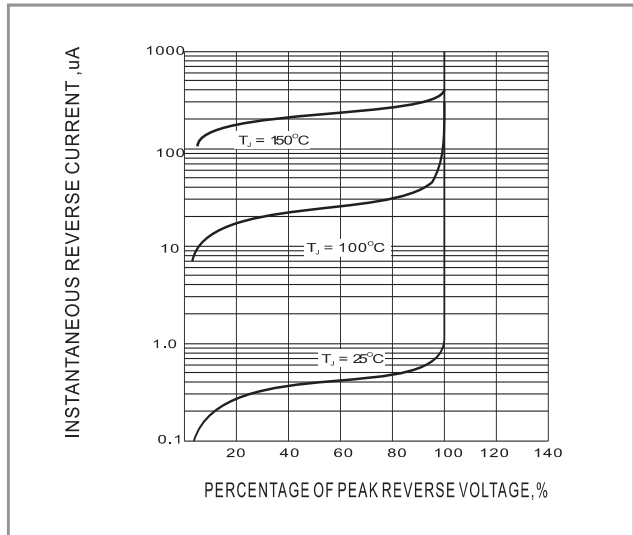


Fig.4-TYPICAL REVERSE CHARACTERISTIC

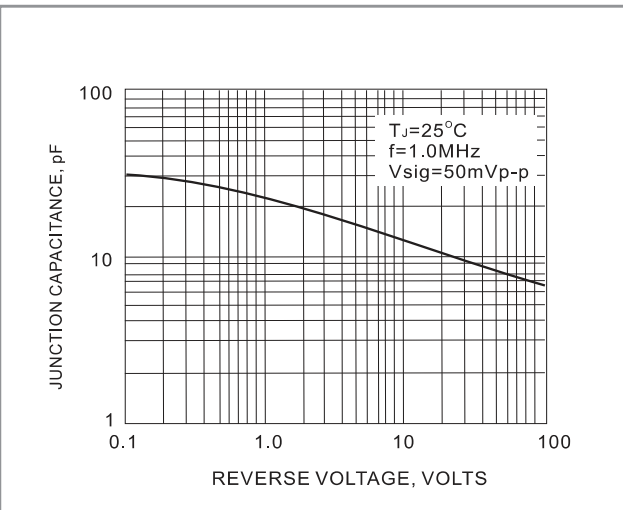


Fig.5 TYPICAL JUNCTION CAPACITANCE



# UF100G SERIES

## Part No\_packing code\_Version

- UF100G\_AY\_00001
- UF100G\_AY\_10001
- UF100G\_B0\_00001
- UF100G\_B0\_10001
- UF100G\_R2\_00001
- UF100G\_R2\_10001

For example :

**RB500V-40\_R2\_00001**



Packing Code XX				Version Code XXXXX		
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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