



# UF2010GP

## ULTRAFAST PLASTIC RECTIFIER

**Voltage**

**1000 V**

**Current**

**2 A**

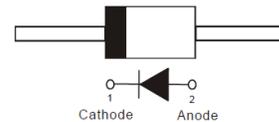
### Features

- Glass passivated chip junction
- Ultrafast reverse recovery time
- Low forward voltage drop
- Low switching losses, high efficiency
- High forward surge capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case: DO-15 Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.014 ounces, 0.4 grams

DO-15



### Maximum Ratings and Thermal Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive 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	$I_{F(AV)}$	2	A
Peak Forward Surge Current: 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	$I_{FSM}$	60	A
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4\text{ V}$	$C_J$	16	pF
Typical Thermal Resistance	$R_{\theta JA}^{(1)}$	90	$^\circ\text{C/W}$
	$R_{\theta JL}^{(2)}$	32	
Operating Junction Temperature Range	$T_J$	-55~150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55~150	$^\circ\text{C}$



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## Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 1\text{ A}, T_J = 25^\circ\text{C}$	-	1.21	-	V
		$I_F = 2\text{ A}, T_J = 25^\circ\text{C}$	-	-	1.7	
		$I_F = 1\text{ A}, T_J = 125^\circ\text{C}$	-	0.92	-	
		$I_F = 2\text{ A}, T_J = 125^\circ\text{C}$	-	1.07	-	
Reverse Current	$I_R$	$V_R = 1000\text{ V}, T_J = 25^\circ\text{C}$	-	-	10	uA
		$V_R = 1000\text{ V}, T_J = 125^\circ\text{C}$	-	15	-	
Reverse Recovery Time	$T_{RR}$	$I_F = 0.5\text{ A}, I_R = 1\text{ A},$ $I_{RR} = 0.25\text{ A}, T_J = 25^\circ\text{C}$	-	-	75	ns

**NOTES:**

1. The testing condition of the thermal resistance (junction to ambient) is based on 10mm lead length between mini copper pads.
2. The testing condition of the thermal resistance (junction to lead) is based on 10mm lead length between two 10cm x 10cm copper pads.



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## TYPICAL CHARACTERISTIC CURVES

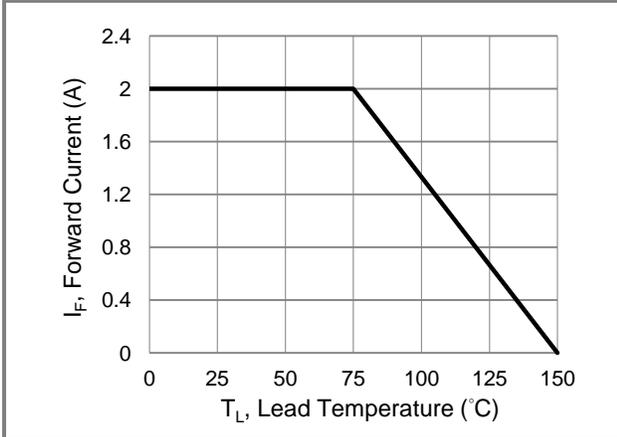


Fig.1 Forward Current Derating Curve

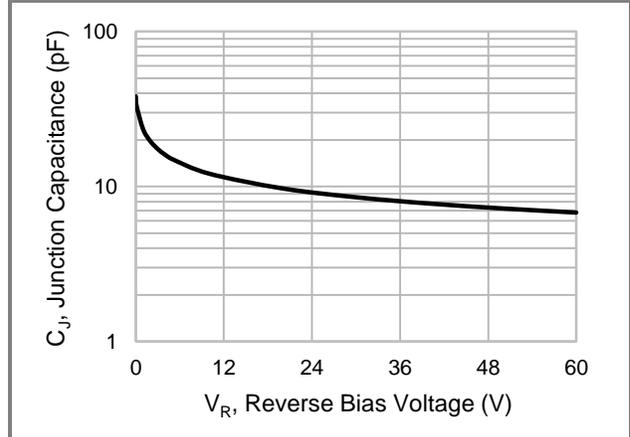


Fig.2 Typical Junction Capacitance

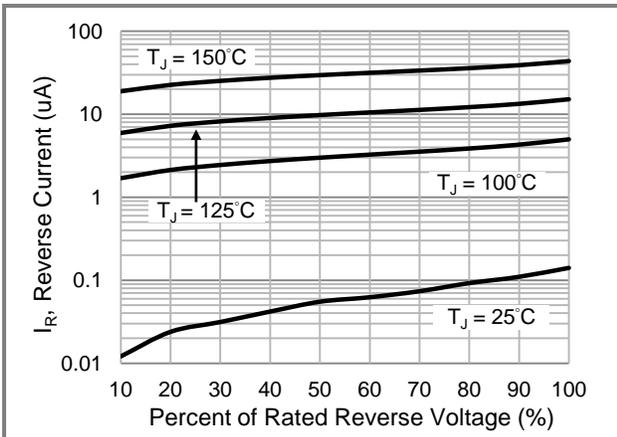


Fig.3 Typical Reverse Characteristics

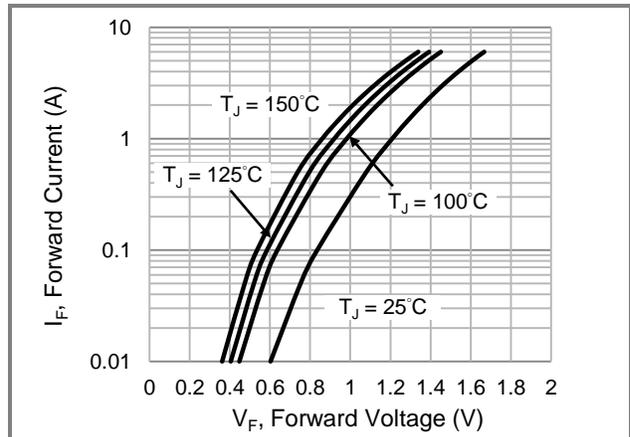


Fig.4 Typical Forward Characteristics

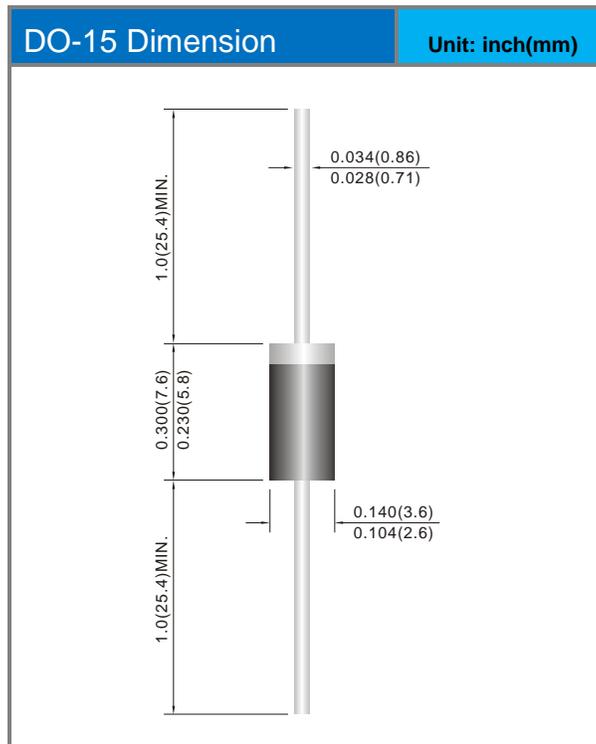


# UF2010GP

## Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
UF2010GP_AY_00001	DO-15	3K pcs / Ammo	UF2010GP	Halogen free

## Packaging Information & Mounting Pad Layout





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