

# UF4001G THRU UF4007G

## GLASS PASSIVATED ULTRA FAST RECOVERY RECTIFIERS

Reverse Voltage – 50 to 1000 V

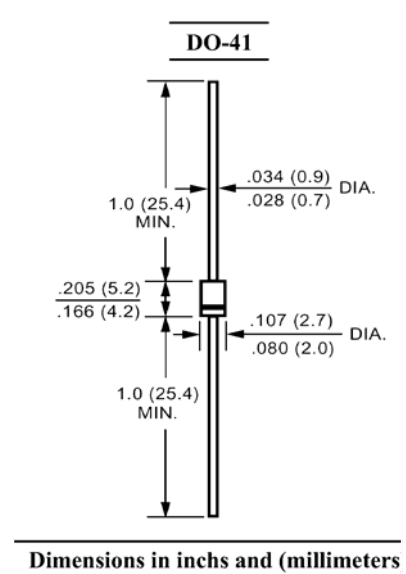
Forward Current – 1 A

### Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Ultra fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability

### Mechanical Data

- **Case:** JEDEC DO-41 molded plastic body
- **Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any



### Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

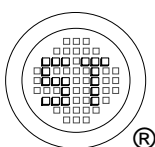
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbols	UF4001G	UF4002G	UF4003G	UF4004G	UF4005G	UF4006G	UF4007G	Units
Maximum Repetitive 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 Rectified Current 0.375"(9.5mm) Lead Length at $T_a = 55^\circ\text{C}$	$I_{F(AV)}$	1							A
Peak Forward Surge Current, 8.3 ms Single Half-sine -wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30							A
Maximum Instantaneous Forward Voltage at 1 A	$V_F$	1				1.7			V
Maximum Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100^\circ\text{C}$	$I_R$					10 50			$\mu\text{A}$
Maximum Reverse Recovery Time <sup>1)</sup>	$t_{rr}$	50				75			ns
Typical Junction Capacitance <sup>2)</sup>	$C_J$	17							pF
Typical Thermal Resistance <sup>3)</sup>	$R_{\theta JA}$	50							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	- 55 to +150							$^\circ\text{C}$

<sup>1)</sup> Reverse recovery conditions  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .

<sup>2)</sup> Measured at 1 MHz and applied reverse voltage of 4 V D.C.

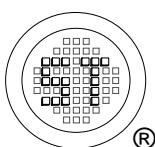
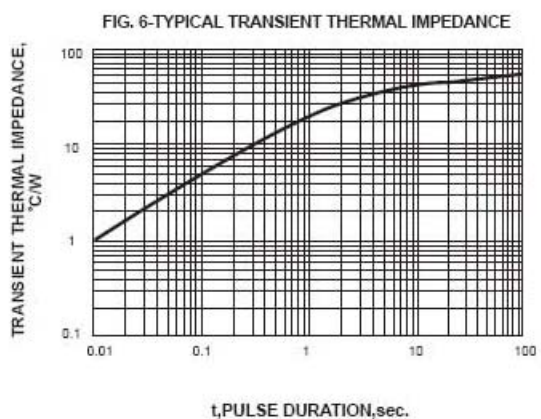
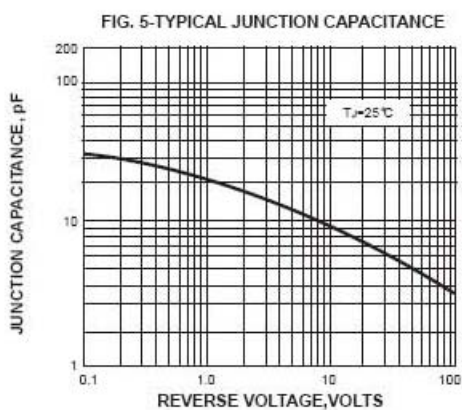
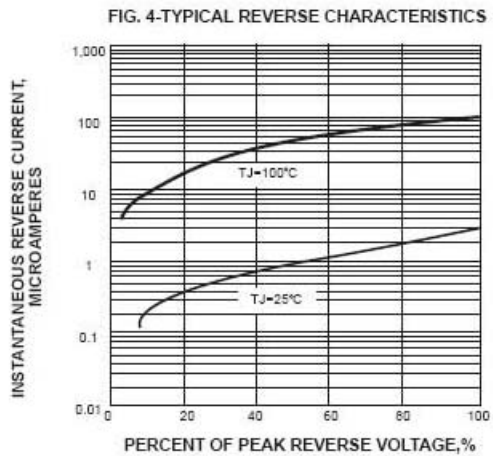
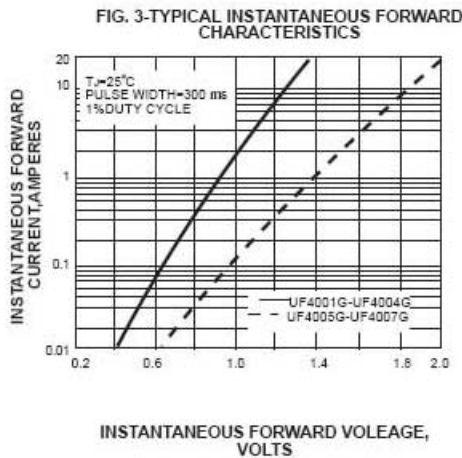
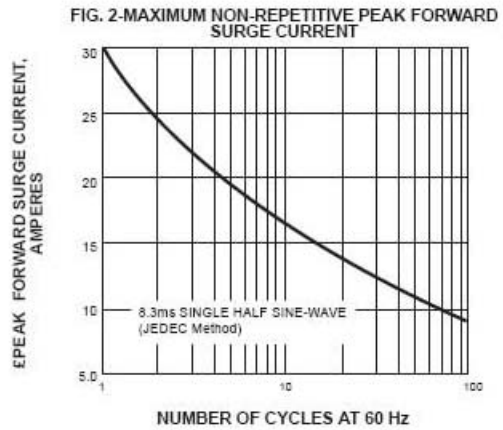
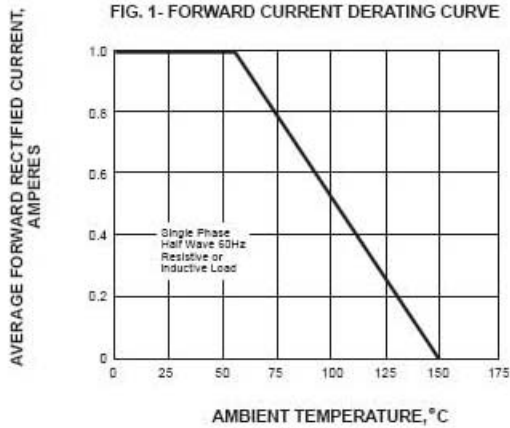
<sup>3)</sup> Thermal resistance from junction to ambient lead at 0.375"(9.5mm) lead length, P.C.B mounted.



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