## UF4001, UF4002, UF4003, UF4004, UF4005, UF4006, UF4007

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## Vishay General Semiconductor

<b>ELECTRICAL CHARACTERISTICS</b> (T <sub>A</sub> = 25 °C unless otherwise noted)											
PARAMETER	TEST CONDITIONS		SYMBOL	UF4001	UF4002	UF4003	UF4004	UF4005	UF4006	UF4007	UNIT
Maximum instantaneous forward voltage	1.0 A		V <sub>F</sub> <sup>(1)</sup>	1.0 1.				1.7		V	
Maximum DC reverse current at rated DC		T <sub>A</sub> = 25 °C	I_	10						- μΑ	
blocking voltage		T <sub>A</sub> = 100 °C	IR	50							
Maximum reverse recovery time	$I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A},$ $I_{rr} = 0.25 \text{ A}$		t <sub>rr</sub>		50			75			ns
Typical junction capacitance	4.0 V, 1 MHz		CJ	17						pF	

#### Note

<sup>(1)</sup> Pulse test: 300 µs pulse width, 1 % duty cycle

THERMAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)									
PARAMETER	SYMBOL	UF4001	UF4002	UF4003	UF4004	UF4005	UF4006	UF4007	UNIT
Typical thermal resistance	R <sub>0JA</sub> (1)	60							°C/W
Typical thermal resistance	R <sub>0JL</sub> (1)	15							0,44

#### Note

<sup>(1)</sup> Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length

ORDERING INFORMATION (Example)								
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE				
UF4007-E3/54	0.33	54	5500	13" diameter paper tape and reel				
UF4007-E3/73	0.34	73	3000	Ammo pack packaging				
UF4007-M3/54	0.33	54	5500	13" diameter paper tape and reel				
UF4007-M3/73	0.34	73	3000	Ammo pack packaging				

### RATINGS AND CHARACTERISTICS CURVES (T<sub>A</sub> = 25 °C unless otherwise noted)

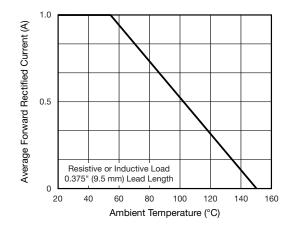


Fig. 1 - Maximum Forward Current Derating Curve

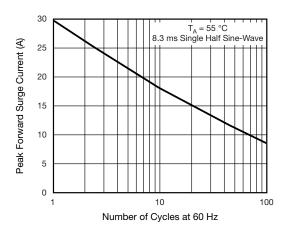


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

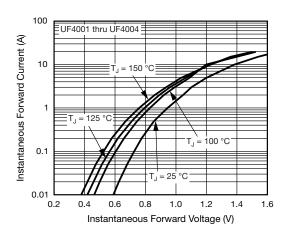


Fig. 3 - Typical Instantaneous Forward Characteristics

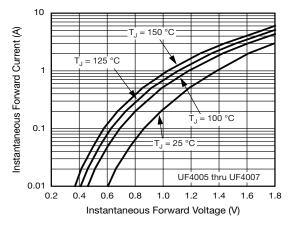


Fig. 4 - Typical Instantaneous Forward Characteristics

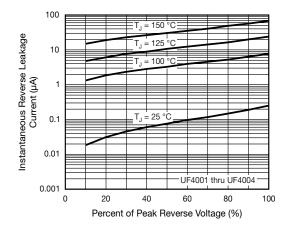


Fig. 5 - Typical Reverse Leakage Characteristics

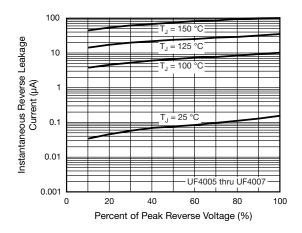


Fig. 6 - Typical Reverse Leakage Characteristics

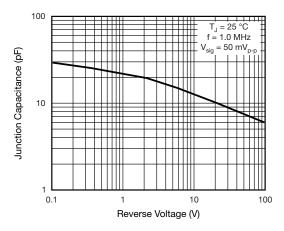


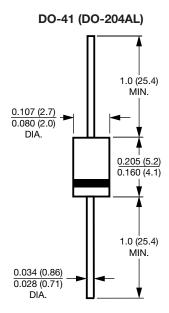
Fig. 7 - Typical Junction Capacitance

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#### **PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)





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