

1N4001GP, 1N4002GP, 1N4003GP, 1N4004GP, 1N4005GP, 1N4006GP, 1N4007GP

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Vishay General Semiconductor

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)										
PARAMETER	TEST CONDITIONS	SYMBOL	1N4001GP	1N4002GP	1N4003GP	1N4004GP	1N4005GP	1N4006GP	1N4007GP	UNIT
Maximum instantaneous forward voltage	1.0 A	V _F	1.1				V			
Maximum DC reverse current	T _A = 25 °C	ı (1)	5.0							μA
at rated DC blocking voltage	T _A = 125 °C	I _R ⁽¹⁾	50							
Typical reverse recovery time	I _F = 0.5 A, I _R = 1.0 A, I _{rr} = 0.25 A	t _{rr}	2.0				μs			
Typical junction capacitance	4.0 V, 1 MHz	CJ	8.0					pF		

Note

⁽³⁾ JEDEC® registered values

THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)									
PARAMETER	SYMBOL	1N4001GP	1N4002GP	1N4003GP	1N4004GP	1N4005GP	1N4006GP	1N4007GP	UNIT
Typical thormal registance	R _{0JA} (1)	55						°C/	
Typical thermal resistance	R _{0JL} (1)	25						W	

Note

⁽¹⁾ Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted

ORDERING INFORMATION (Example)								
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE				
1N4004GP-E3/54	0.335	54	5500	13" diameter paper tape and reel				
1N4004GP-E3/73	0.335	73	3000	Ammo pack packaging				

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25$ °C unless otherwise noted)

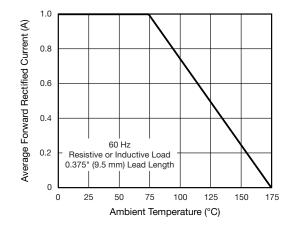


Fig. 1 - Forward Current Derating Curve

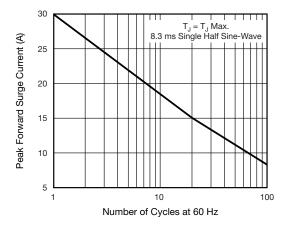


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current



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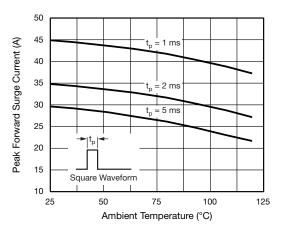


Fig. 3 - Non-Repetitive Peak Forward Surge Current

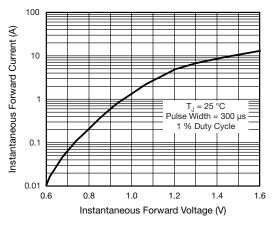


Fig. 4 - Typical Instantaneous Forward Characteristics

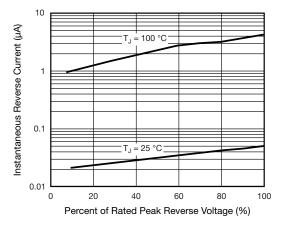


Fig. 5 - Typical Reverse Characteristics

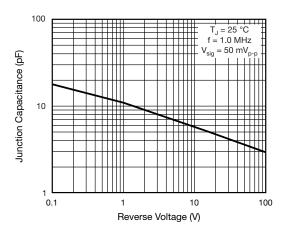


Fig. 6 - Typical Junction Capacitance

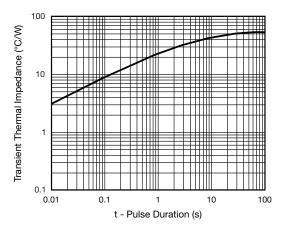


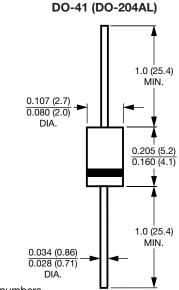
Fig. 7 - Typical Transient Thermal Impedance

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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

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Note

• Lead diameter is $\frac{0.026 (0.66)}{0.023 (0.58)}$ for suffix "E" part numbers



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