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Vishay General Semiconductor

ELECTRICAL CHARACTERISTICS ($T_A = 25 \text{ °C}$ unless otherwise noted)								
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT		
Maximum instantaneous forward voltage	I _F = 2 A	T _J = 25 °C	V_{F} ⁽¹⁾	0.50	0.55	v		
	I _F = 2 A	T _J = 125 °C		0.43	0.50			
Maximum reverse current at rated V_R voltage		T _J = 25 °C	I _R ⁽²⁾	-	150	μA		
		T _J = 125 °C		8	15	mA		
Typical junction capacitance	4.0 V, 1 MHz		CJ	110		pF		

Notes

 $^{(1)}\,$ Pulse test: 300 μs pulse width, 1 % duty cycle

⁽²⁾ Pulse test: Pulse width \leq 40 ms

THERMAL CHARACTERISTICS ($T_A = 25$ °C unless otherwise noted)						
PARAMETER	SYMBOL	SS2P2	SS2P3	SS2P4	UNIT	
Typical thermal resistance	R _{0JA} ⁽¹⁾	115			°C/W	
	R _{0JL} ⁽¹⁾					
	R _{θJC} ⁽¹⁾		20			

Note

⁽¹⁾ Thermal resistance from junction to ambient and junction to lead mounted on PCB with 6.0 mm x 6.0 mm copper pad areas $R_{\theta JL}$ is measured at the terminal of cathode band. $R_{\theta JC}$ is measured at the top center of the body

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
SS2P4-M3/84A	0.024	84A	3000	7" diameter plastic tape and reel			
SS2P4-M3/85A	0.024	85A	10 000	13" diameter plastic tape and reel			
SS2P4HM3/84A (1)	0.024	84A	3000	7" diameter plastic tape and reel			
SS2P4HM3/85A (1)	0.024	85A	10 000	13" diameter plastic tape and reel			

Note

⁽¹⁾ Automotive grade





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

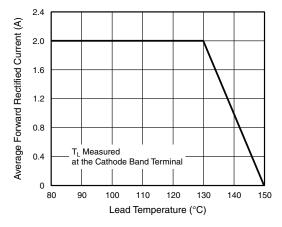


Fig. 1 - Forward Current Derating Curve

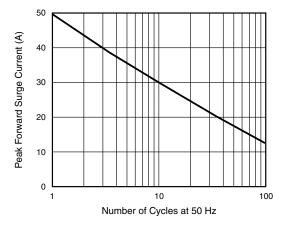


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

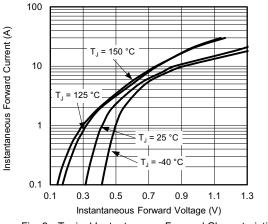
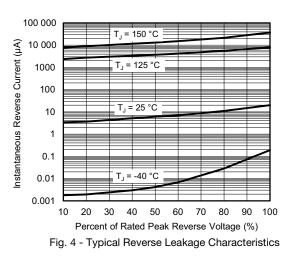
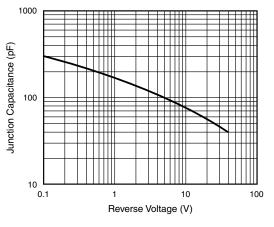


Fig. 3 - Typical Instantaneous Forward Characteristics







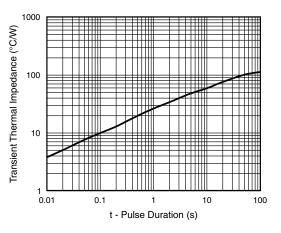


Fig. 6 - Typical Transient Thermal Impedance

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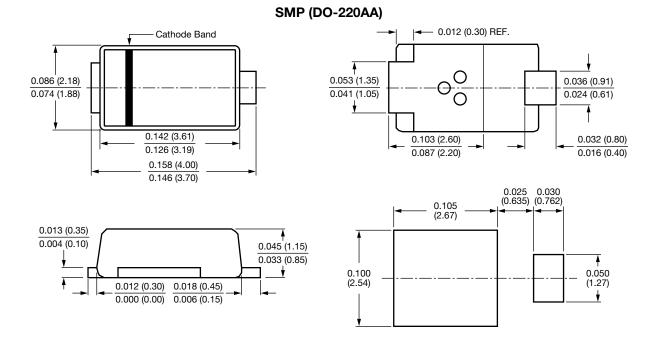
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For technical questions within your region: <u>DiodesAmericas@vishay.com</u>, <u>DiodesAsia@vishay.com</u>, <u>DiodesEurope@vishay.com</u> THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT <u>www.vishay.com/doc?91000</u>

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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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