

S4PB, S4PD, S4PG, S4PJ, S4PK, S4PM

Vishay General Semiconductor

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)								
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT		
Instantaneous forward voltage	I _F = 2.0 A	T _A = 25 °C	V _F ⁽¹⁾	0.897	-	V		
	I _F = 4.0 A			0.958	1.10			
	I _F = 2.0 A	T _A = 125 °C		0.783	-			
	I _F = 4.0 A			0.860	0.95			
Reverse current	Rated V _R	T _A = 25 °C	I _R ⁽²⁾	-	10	μА		
	nated v _R	T _A = 125 °C		55	100			
Max. reverse recovery time	$I_F = 0.5 A, I_R$ $I_{rr} = 0.25 A$	= 1.0 A,	t _{rr}	2.5	-	μs		
Typical junction capacitance	4.0 V, 1 MHz	4.0 V, 1 MHz		30	-	pF		

Notes

(1) Pulse test: 300 µs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise specified)								
PARAMETER	SYMBOL	S4PB	S4PD	S4PG	S4PJ	S4PK	S4PM	UNIT
Typical thermal resistance	R _{0JA} (1)	60						°C/W
Typical thermal resistance	$R_{ heta JL}$	4						

Note

⁽¹⁾ Units mounted on recommended PCB 1 oz. pad layout

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
S4PJ-M3/86A	0.10	86A	1500	7" diameter plastic tape and reel			
S4PJ-M3/87A	0.10	87A	6500	13" diameter plastic tape and reel			
S4PJHM3_A/H (1)	0.10	Н	1500	7" diameter plastic tape and reel			
S4PJHM3_A/I ⁽¹⁾	0.10	I	6500	13" diameter plastic tape and reel			

Note

(1) AEC-Q101 qualified



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

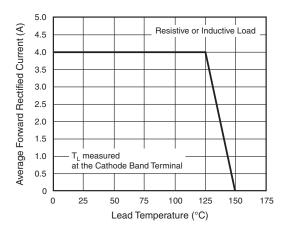


Fig. 1 - Maximum Forward Current Derating Curve

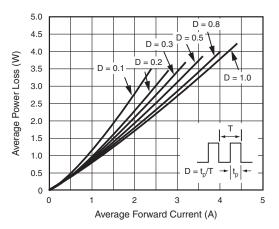


Fig. 2 - Forward Power Loss Characteristics

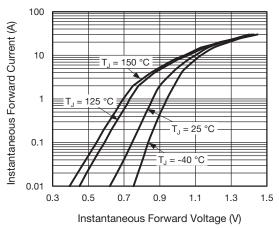


Fig. 3 - Typical Instantaneous Forward Characteristics

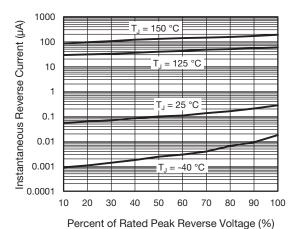


Fig. 4 - Typical Reverse Leakage Characteristics

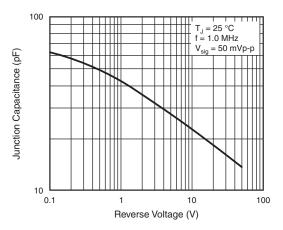


Fig. 5 - Typical Junction Capacitance

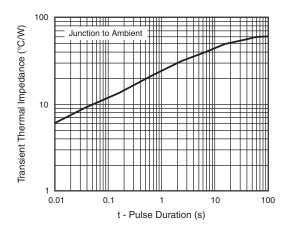
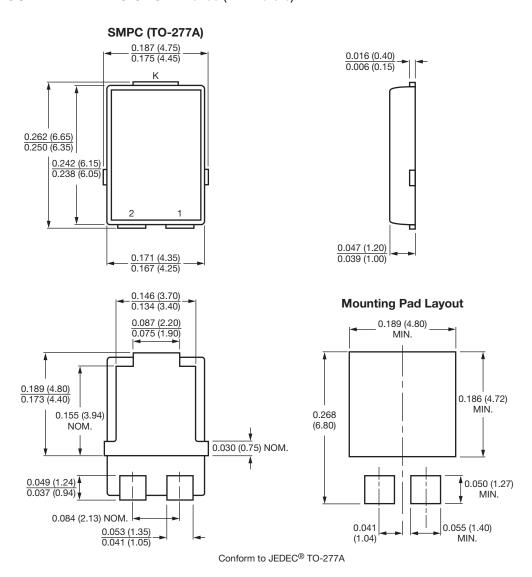


Fig. 6 - Typical Transient Thermal Impedance



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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)



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