

Vishay General Semiconductor

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)								
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT		
Instantaneous forward voltage per diode	I _F = 5 A	T _A = 25 °C	V _F ⁽¹⁾	0.48	-	V		
	I _F = 10 A			0.57	-			
	I _F = 20 A			0.74	0.82			
	I _F = 5 A	T _A = 125 °C		0.41	-			
	I _F = 10 A			0.52	-			
	I _F = 20 A			0.62	0.70			
Reverse current per diode	V _R = 90 V	T _A = 25 °C	I _R ⁽²⁾	0.01	-	mA		
		T _A = 125 °C		9.0	-			
	V _R = 120 V	T _A = 25 °C		-	0.7			
		T _A = 125 °C		20.0	38			
Junction capacitance	4 V, 1MHz		CJ	2400	-	pF		

Notes

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

(2) Pulse test: Pulse width ≤ 5 ms

THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)						
PARAMETER	SYMBOL	V40120CI	UNIT			
Typical thermal resistance per device	$R_{ heta JC}$	1.7	°C/W			

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
V40120CI-M3/P	1.88	Р	50/tube	Tube			

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

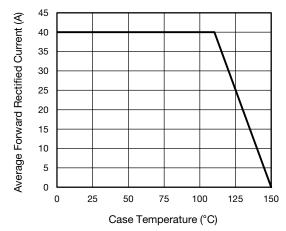


Fig. 1 - Forward Current Derating Curve

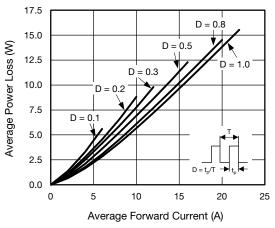


Fig. 2 - Forward Power Loss Characteristics Per Diode

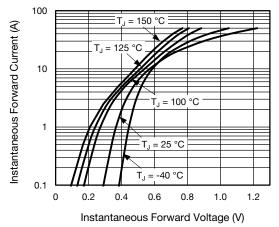


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

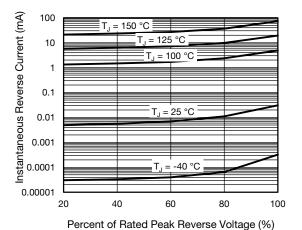


Fig. 4 - Typical Reverse Characteristics Per Diode

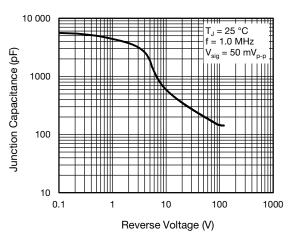


Fig. 5 - Typical Junction Capacitance

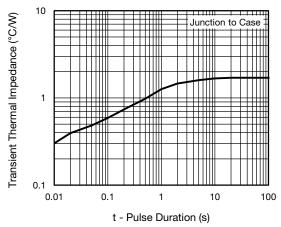
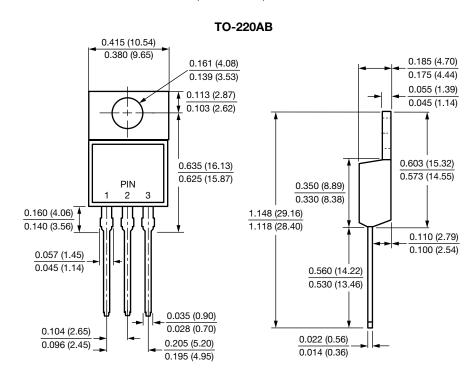


Fig. 6 - Typical Transient Thermal Impedance Per Device



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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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