Vishay General Semiconductor



ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)									
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT			
Breakdown voltage	I _R = 1.0 mA	T _J = 25 °C	V_{BR}	100 (minimum)	-	V			
Instantaneous forward voltage per diode ⁽¹⁾	I _F = 8 A I _F = 15 A	T _J = 25 °C	V _F	0.64 0.78	- 0.85	V			
	I _F = 8 A I _F = 15 A	T _J = 125 °C		0.57 0.65	- 0.71				
Reverse current per diode (2)	V _R = 70 V	T _J = 25 °C T _J = 125 °C	. I _R	3.30 3.25	-	μA mA			
	V _R = 100 V	T _J = 25 °C T _J = 125 °C		13.7 7.2	300 20	μA mA			

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 noted)							
PARAMETER	SYMBOL	V30100P	UNIT				
Typical thermal resistance per diode	$R_{ heta JC}$	2.0	°C/W				

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
V30100P-E3/45	6.12	45	30/tube	Tube			

RATINGS AND CHARACTERISTICS CURVES

(T_A = 25 °C unless otherwise noted)

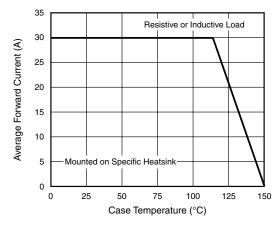


Figure 1. Forward Current Derating Curve

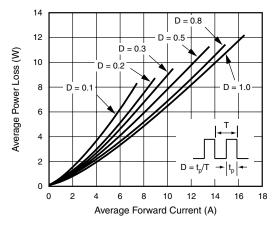


Figure 2. Forward Power Loss Characteristics Per Diode



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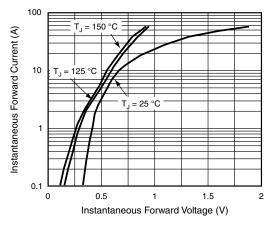


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

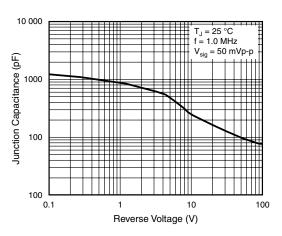


Figure 5. Typical Junction Capacitance Per Diode

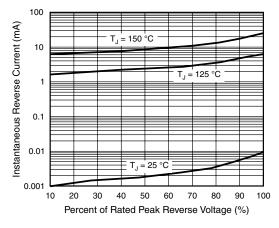


Figure 4. Typical Reverse Characteristics Per Diode

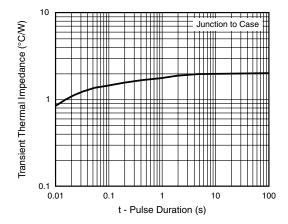
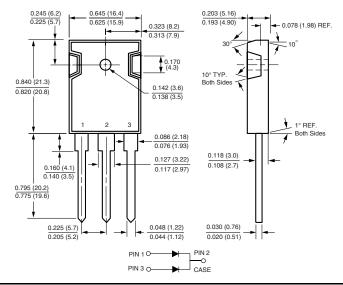


Figure 6. Typical Transient Thermal Impedance Per Diode

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

TO-247AD (TO-3P)



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