

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)						
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT
Breakdown voltage	I _R = 1.0 mA	T _A = 25 °C	V _{BR}	100 (minimum)	-	V
Instantaneous forward voltage per diode	I _F = 5 A	T _A = 25 °C	V _F ⁽¹⁾	0.48	-	V
	I _F = 10 A			0.56	-	
	I _F = 20 A			0.69	-	
	I _F = 25 A			0.76	0.84	
	I _F = 5 A	T _A = 125 °C		0.39	-	
	I _F = 10 A			0.50	-	
	I _F = 20 A			0.61	-	
	I _F = 25 A			0.66	0.74	
Reverse current per diode	V _R = 70 V	T _A = 25 °C	I _R ⁽²⁾	23	-	μA
		T _A = 125 °C		11	-	mA
	V _R = 100 V	T _A = 25 °C		-	1000	μA
		T _A = 125 °C		29	80	mA

Notes

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

(2) Pulse test: Pulse width $\leq 40\text{ ms}$

THERMAL CHARACTERISTICS ($T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)				
PARAMETER		SYMBOL	V50100PW	UNIT
Typical thermal resistance	per diode	$R_{\theta JC}$	1.5	$^{\circ}\text{C/W}$
	per device		0.8	

ORDERING INFORMATION (Example)					
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TO-3PW	V50100PW-M3/4W	4.5	4W	30/tube	Tube

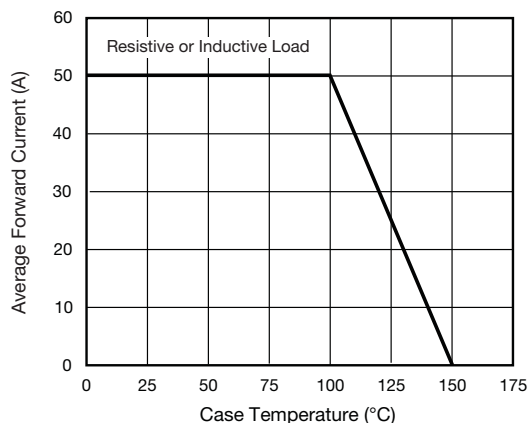
RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)


Fig. 1 - Forward Current Derating Curve

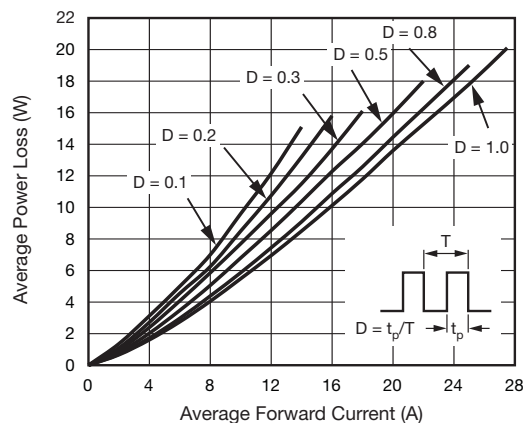


Fig. 2 - Forward Power Loss Characteristics Per Diode

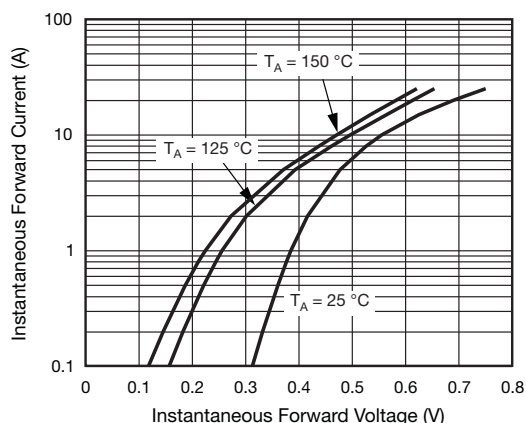


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

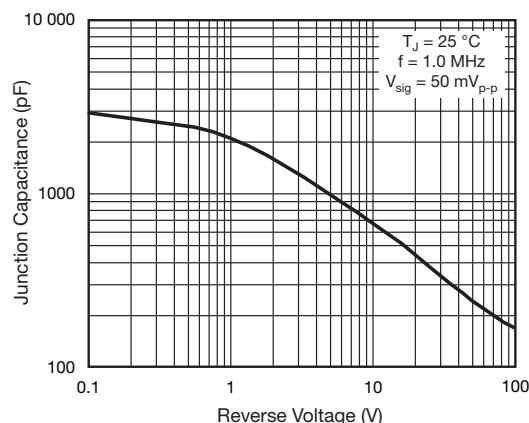


Fig. 5 - Typical Junction Capacitance Per Diode

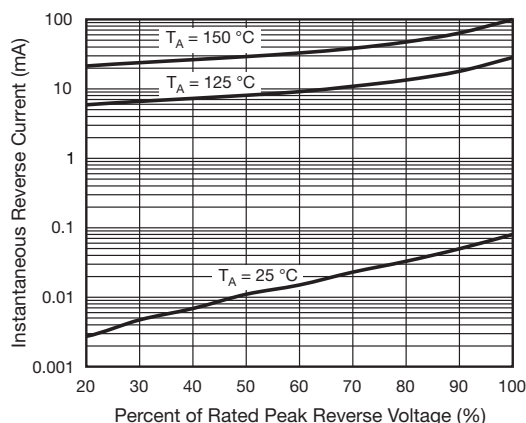


Fig. 4 - Typical Reverse Characteristics Per Diode

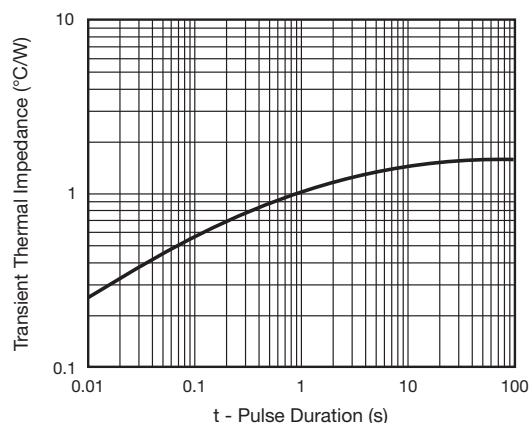
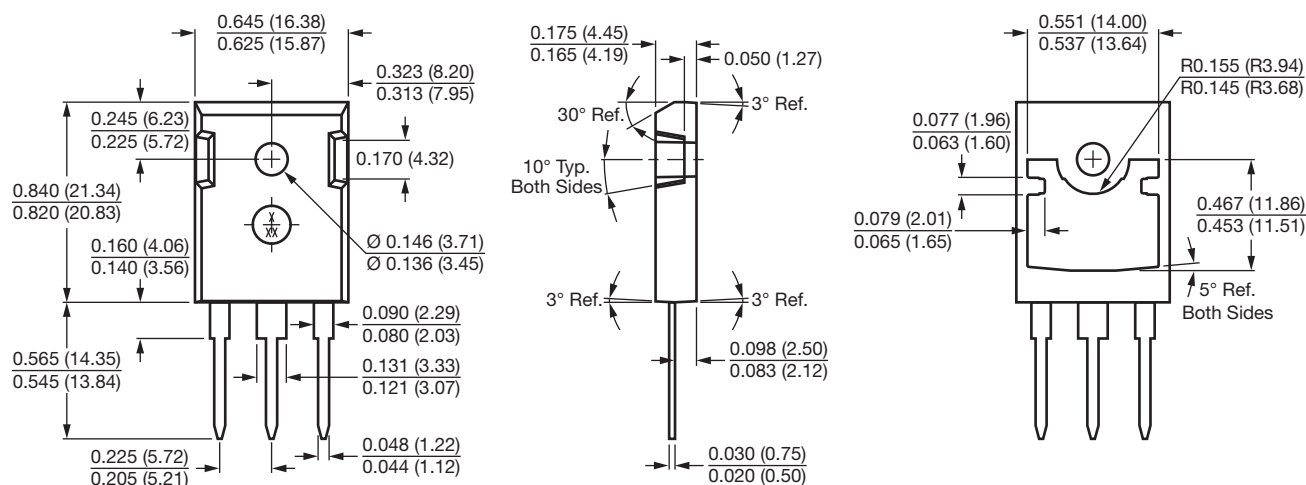


Fig. 6 - Typical Transient Thermal Impedance Per Diode

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

TO-3PW





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