ELECTRICAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)						
PARAMETER	**TEST CONDITIONS**		**SYMBOL**	**TYP.**	**MAX.**	**UNIT**
Instantaneous forward voltage	I_F = 5.0 A	T_A = 25 °C	V_F (1)	0.40	-	V
	I_F = 10 A			0.45	-	
	I_F = 20 A			0.51	0.59	
	I_F = 5.0 A	T_A = 125 °C		0.29	-	
	I_F = 10 A			0.36	-	
	I_F = 20 A			0.46	0.54	
Reverse current	V_R = 45 V	T_A = 25 °C	I_R (2)	0.025	-	mA
		T_A = 125 °C		17	-	
	V_R = 60 V	T_A = 25 °C		-	4	mA
		T_A = 125 °C		35	100	

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**	**V20PL60**	**UNIT**
Typical thermal resistance	$R_{\theta JA}$ (1)(2)	68	°C/W
	$R_{\theta JM}$ (3)	4	

Notes

(1) Free air, mounted on recommended copper pad area; thermal resistance $R_{\theta JA}$ - junction to ambient

(2) The heat generated must be less than the thermal conductivity from junction-to-ambient: $dP_D/dT_J < 1/R_{\theta JA}$

(3) Mounted on 30 mm x 30 mm 2 oz. pad PCB; thermal resistance $R_{\theta JM}$ - junction to mount measured at cathode side

ORDERING INFORMATION (Example)				
PREFERRED P/N	**UNIT WEIGHT (g)**	**PREFERRED PACKAGE CODE**	**BASE QUANTITY**	**DELIVERY MODE**
V20PL60-M3/86A	0.10	86A	1500	7" diameter plastic tape and reel
V20PL60-M3/87A	0.10	87A	6500	13" diameter plastic tape and reel

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

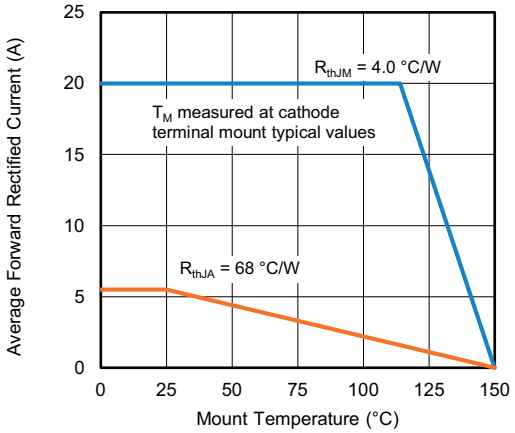


Fig. 1 - Maximum Forward Current Derating Curve

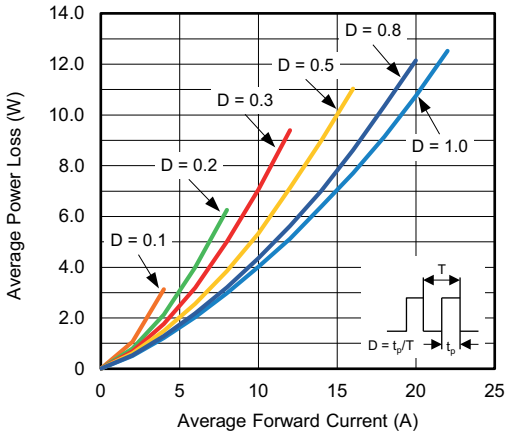


Fig. 2 - Forward Power Loss Characteristics

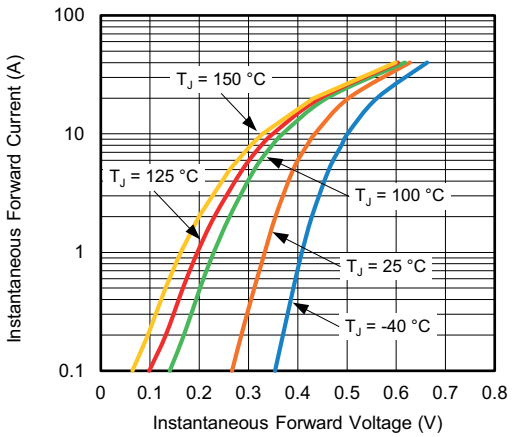


Fig. 3 - Typical Instantaneous Forward Characteristics

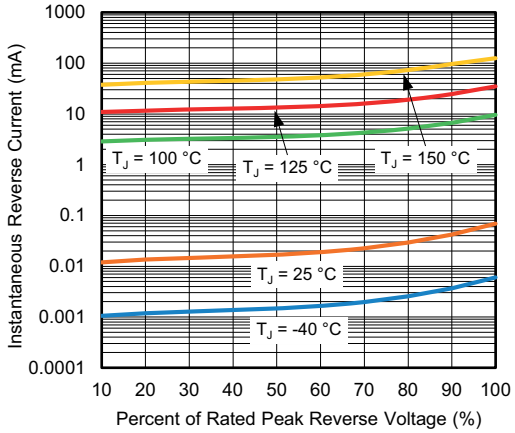


Fig. 4 - Typical Reverse Leakage Characteristics

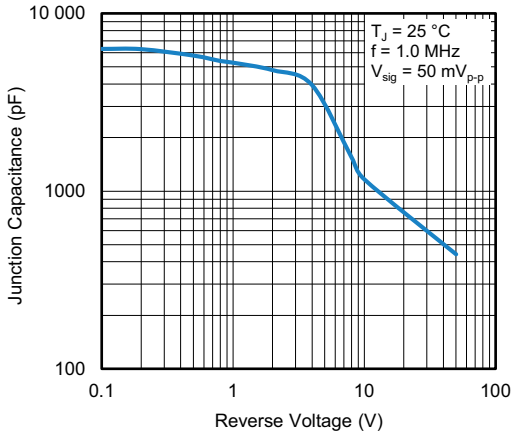


Fig. 5 - Typical Junction Capacitance

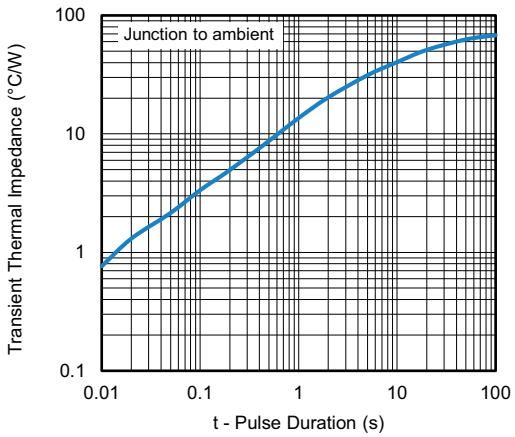
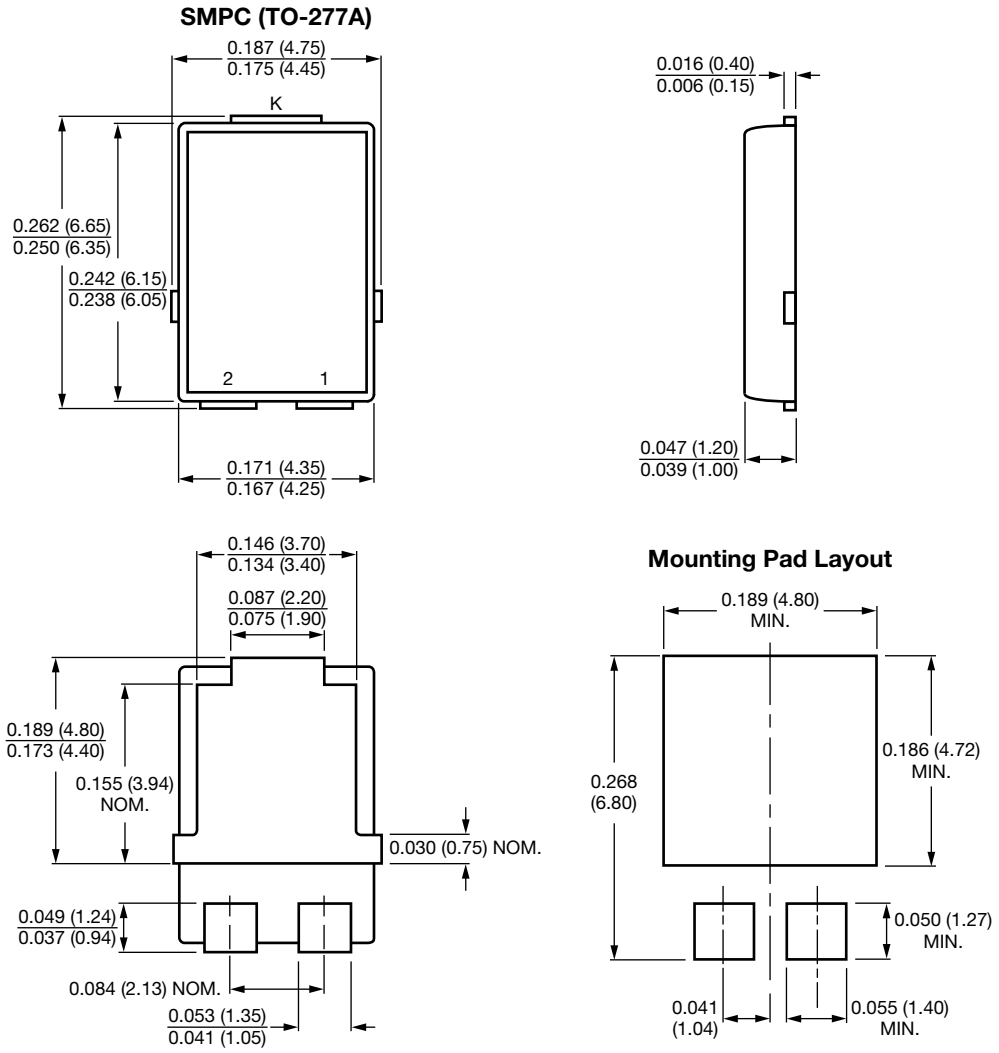


Fig. 6 - Typical Transient Thermal Impedance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)



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