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}	120 (minimum)	-	V
Instantaneous forward voltage	I_F = 6 A	T_A = 25 °C	V_F (1)	0.57	-	V
	I_F = 12 A			0.72	0.80	
	I_F = 6 A	T_A = 125 °C		0.51	-	
	I_F = 12 A			0.63	0.70	
Reverse current	V_R = 90 V	T_A = 25 °C	I_R (2)	13	-	µA
		T_A = 125 °C		7	-	mA
	V_R = 120 V	T_A = 25 °C		50	500	µA
		T_A = 125 °C		16	50	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**	**V12P12**	**UNIT**
Typical thermal resistance	$R_{\theta JA}$ (1)	60	°C/W
	$R_{\theta JL}$	4	

Note

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

ORDERING INFORMATION (Example)				
PREFERRED P/N	**UNIT WEIGHT (g)**	**PREFERRED PACKAGE CODE**	**BASE QUANTITY**	**DELIVERY MODE**
V12P12-M3/86A	0.10	86A	1500	7" diameter plastic tape and reel
V12P12-M3/87A	0.10	87A	6500	13" diameter plastic tape and reel
V12P12HM3/86A (1)	0.10	86A	1500	7" diameter plastic tape and reel
V12P12HM3/87A (1)	0.10	87A	6500	13" diameter plastic tape and reel
V12P12HM3_A/H (1)	0.10	H	1500	7" diameter plastic tape and reel
V12P12HM3_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)

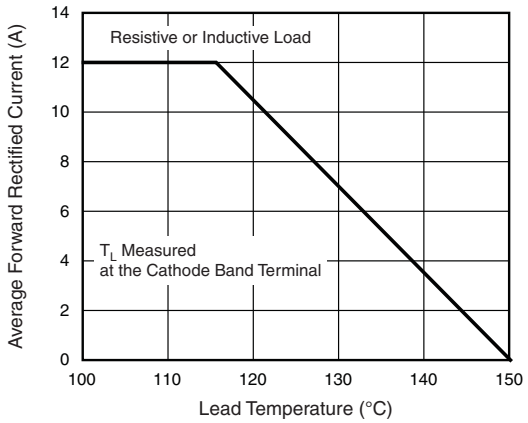

Fig. 1 - Maximum Forward Current Derating Curve

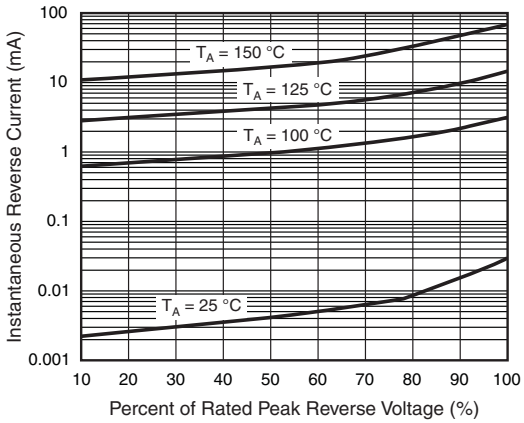

Fig. 4 - Typical Reverse Characteristics

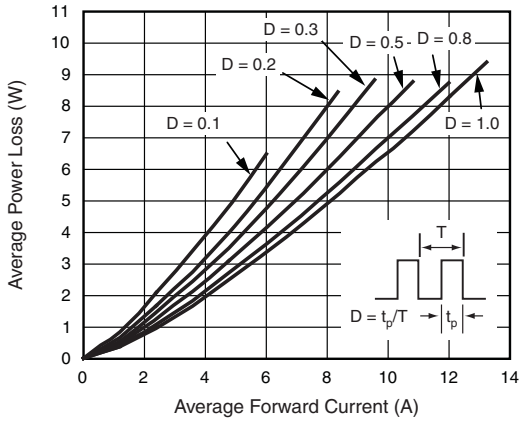

Fig. 2 - Forward Power Loss Characteristics

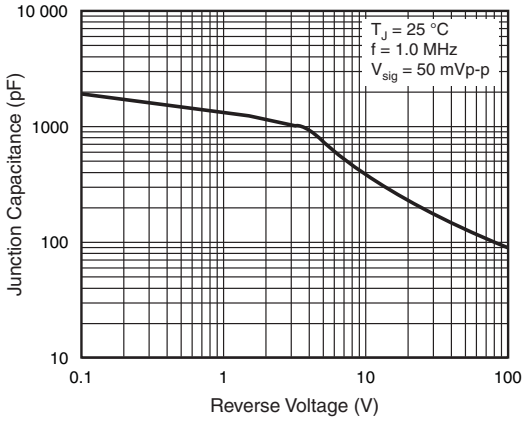

Fig. 5 - Typical Junction Capacitance

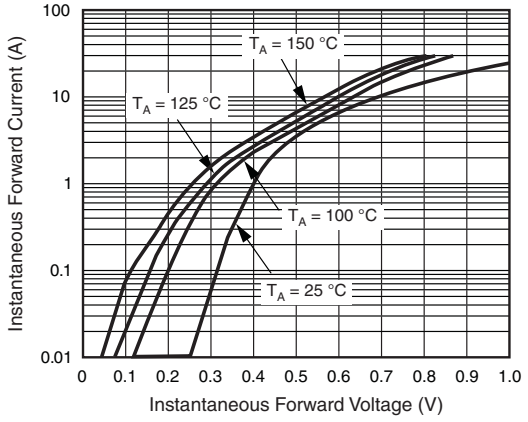

Fig. 3 - Typical Instantaneous Forward Characteristics

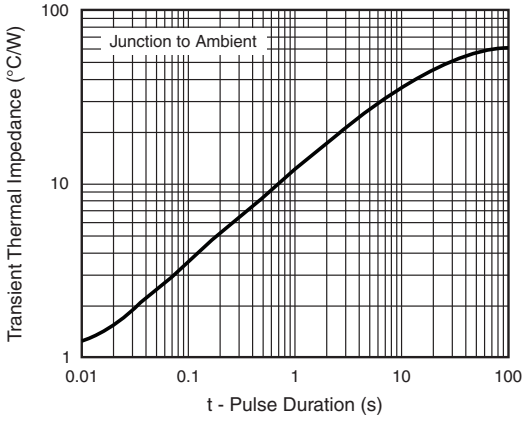

Fig. 6 - Typical Transient Thermal Impedance

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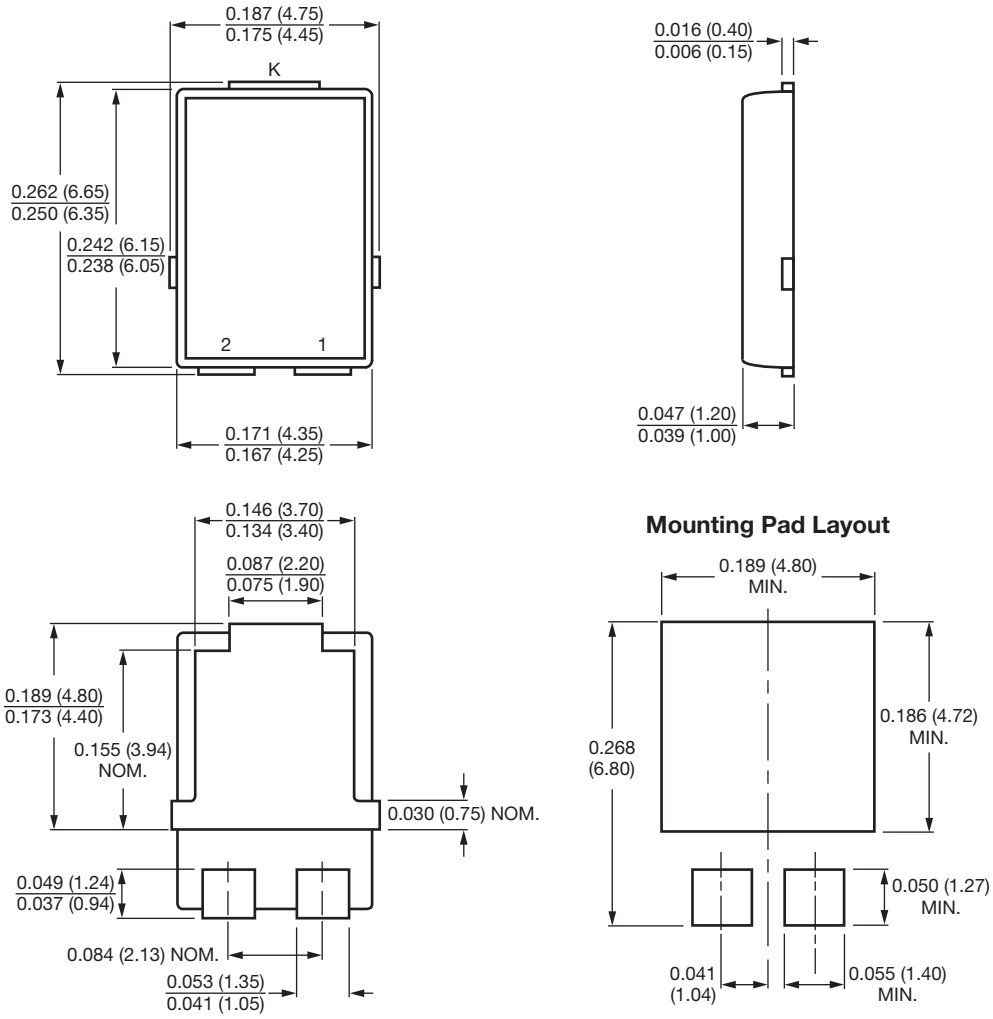
PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

TO-277A (SMPC)



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