ELECTRICAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)						
PARAMETER	**TEST CONDITIONS**		**SYMBOL**	**TYP.**	**MAX.**	**UNIT**
Instantaneous forward voltage	I_F = 1.0 A	T_A = 25 °C	V_F (1)	0.95	-	V
		T_A = 125 °C		0.84	-	
	I_F = 1.5 A	T_A = 25 °C		0.99	1.15	
		T_A = 125 °C		0.89	1.0	
Reverse current	Rated V_R	T_A = 25 °C	I_R (2)	0.3	5	µA
		T_A = 125 °C		35	100	
Typical reverse recovery time	I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A		t_{rr}	1.5	-	µs
Typical junction capacitance	4.0 V, 1 MHz		C_J	10.4	-	pF

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**	**AS1PD**	**AS1PG**	**AS1PJ**	**AS1PK**	**AS1PM**	**UNIT**
Typical thermal resistance	$R_{\theta JA}$ (1)	115					°C/W
	$R_{\theta JM}$ (1)	15					

Note

(1) Unit mounted on PCB with 5 mm x 5 mm copper pad areas. Thermal resistance $R_{\theta JA}$ - junction to ambient, $R_{\theta JM}$ - junction to mount at the terminal of cathode band

ORDERING INFORMATION (Example)				
PREFERRED P/N	**UNIT WEIGHT (g)**	**PREFERRED PACKAGE CODE**	**BASE QUANTITY**	**DELIVERY MODE**
AS1PJ-M3/84A	0.024	84A	3000	7" diameter plastic tape and reel
AS1PJ-M3/85A	0.024	85A	10 000	13" diameter plastic tape and reel
AS1PJHM3/84A (1)	0.024	84A	3000	7" diameter plastic tape and reel
AS1PJHM3/85A (1)	0.024	85A	10 000	13" diameter plastic tape and reel

Note

(1) AEC-Q101 qualified

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

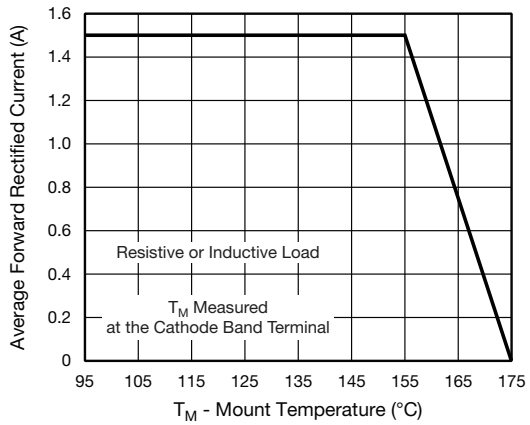


Fig. 1 - Max. Forward Current Derating Curve

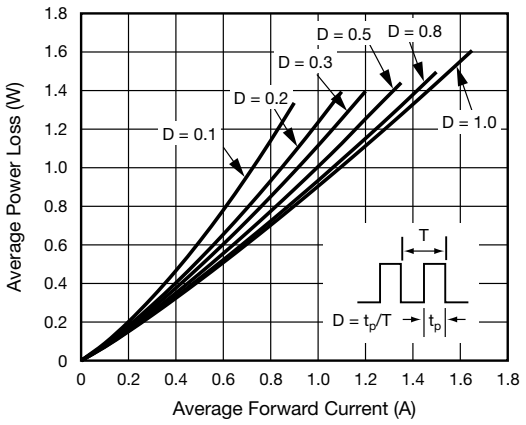


Fig. 2 - Forward Power Loss Characteristics

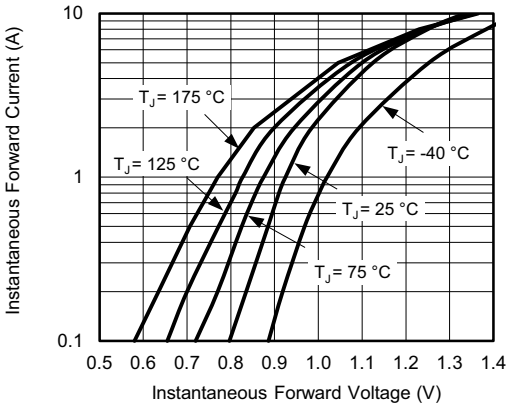


Fig. 3 - Typical Instantaneous Forward Characteristics

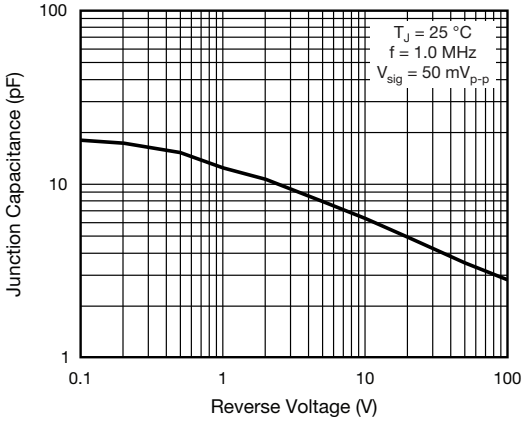


Fig. 5 - Typical Junction Capacitance

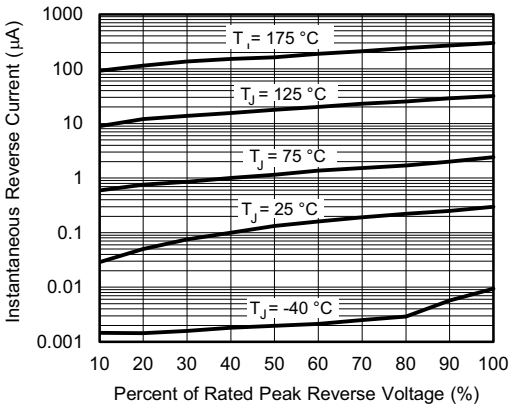


Fig. 4 - Typical Reverse Characteristics

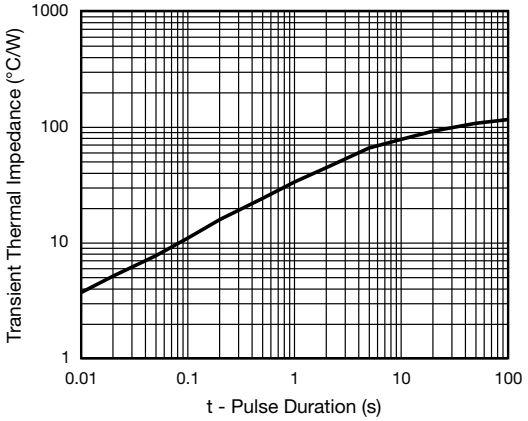
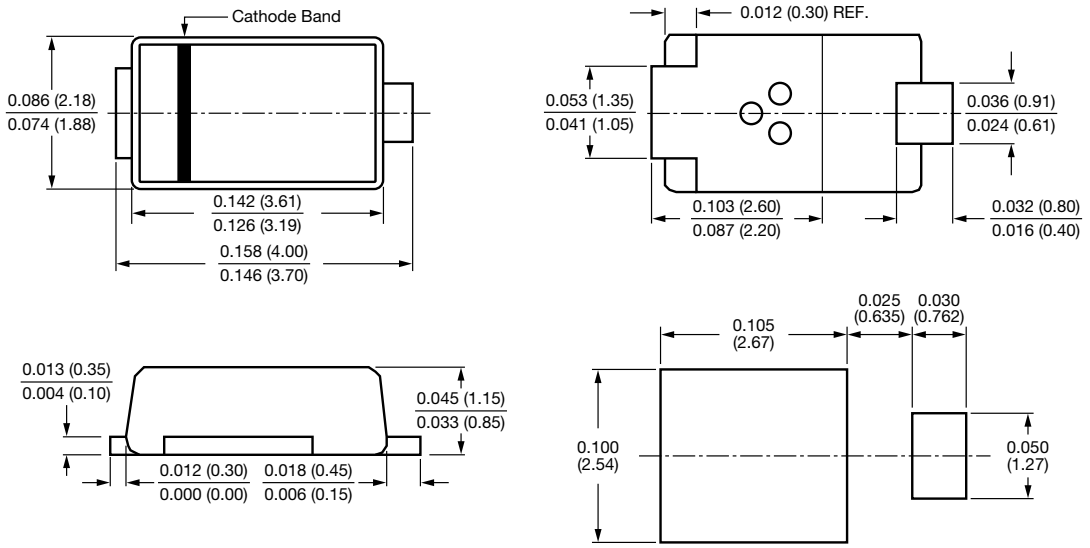


Fig. 6 - Typical Transient Thermal Impedance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

SMP (DO-220AA)



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