



ELECTRICAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)								
PARAMETER	TEST CONDITIONS	SYMBOL	AU1PD	AU1PG	AU1PJ	AU1PK	AU1PM	UNIT
Maximum instantaneous forward voltage	I <sub>F</sub> = 1.0 A	T <sub>A</sub> = 25 °C	V <sub>F</sub> <sup>(1)</sup>		1.5		1.85	
		T <sub>A</sub> = 125 °C			1.4		1.6	
Maximum reverse current	Rated V <sub>R</sub>	T <sub>A</sub> = 25 °C	1.0					μA
		T <sub>A</sub> = 125 °C	100					
Maximum reverse recovery time	I <sub>F</sub> = 0.5 A, I <sub>R</sub> = 1.0 A, I <sub>rr</sub> = 0.25 A	t <sub>rr</sub>	75					ns
Typical junction capacitance	4.0 V, 1 MHz	C <sub>J</sub>	11			7.5		pF

**Notes**

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
- (2) Pulse test: pulse width ≤ 40 ms

THERMAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)								
PARAMETER	SYMBOL	AU1PD	AU1PG	AU1PJ	AU1PK	AU1PM	UNIT	
Typical thermal resistance	R <sub>θJA</sub> <sup>(1)</sup>	132					°C/W	
	R <sub>θJM</sub> <sup>(1)</sup>	15						

**Note**

- (1) Free air, mounted on recommended copper pad area. Thermal resistance R<sub>θJA</sub> - junction to ambient, R<sub>θJM</sub> - junction to mount at the terminal cathode band

ORDERING INFORMATION (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
AU1PJ-M3/84A	0.024	84A	3000	7" diameter plastic tape and reel
AU1PJ-M3/85A	0.024	85A	10 000	13" diameter plastic tape and reel
AU1PJHM3/84A <sup>(1)</sup>	0.024	84A	3000	7" diameter plastic tape and reel
AU1PJHM3/85A <sup>(1)</sup>	0.024	85A	10 000	13" diameter plastic tape and reel

**Note**

- (1) AEC-Q101 qualified

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

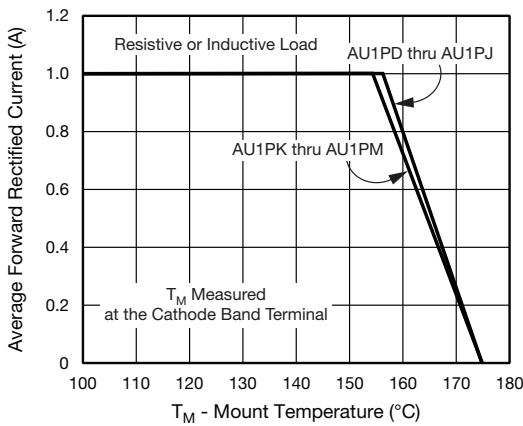


Fig. 1 - Maximum Forward Current Derating Curve

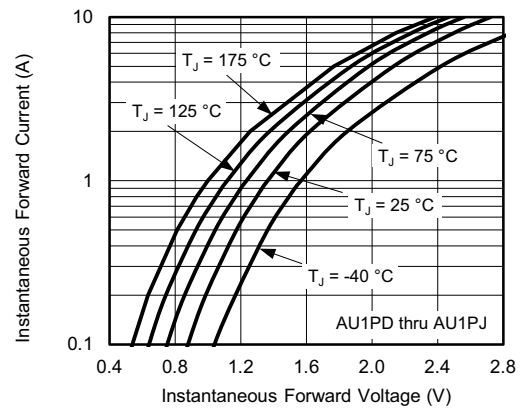


Fig. 4 - Typical Instantaneous Forward Characteristics

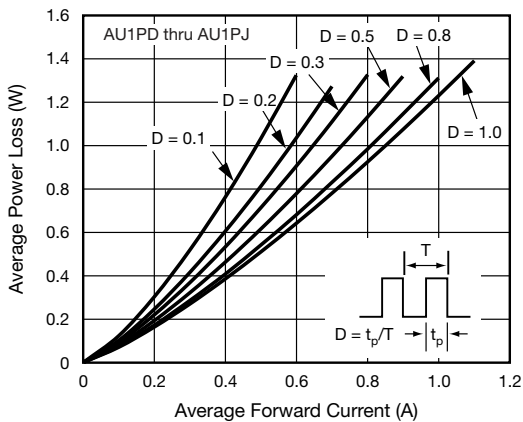


Fig. 2 - Forward Power Loss Characteristics

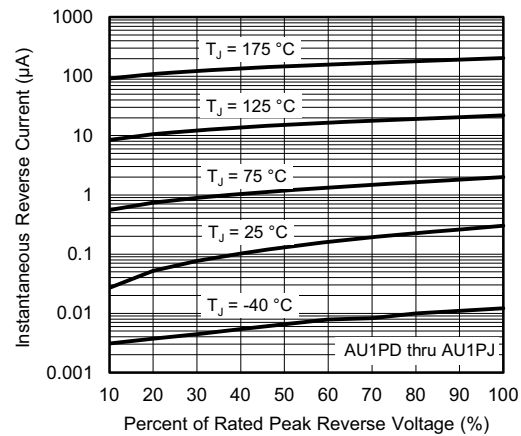


Fig. 5 - Typical Instantaneous Forward Characteristics

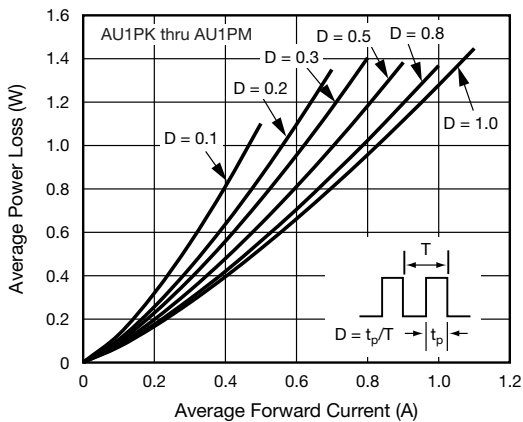


Fig. 3 - Forward Power Loss Characteristics

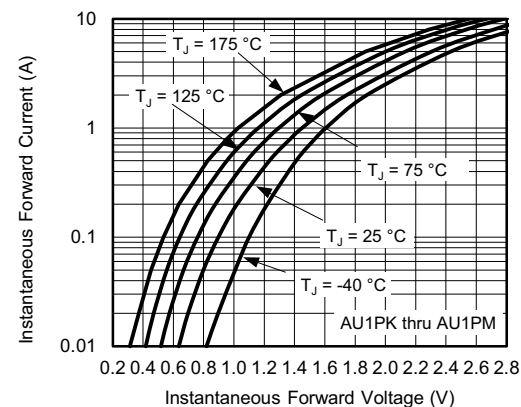


Fig. 6 - Typical Reverse Characteristics

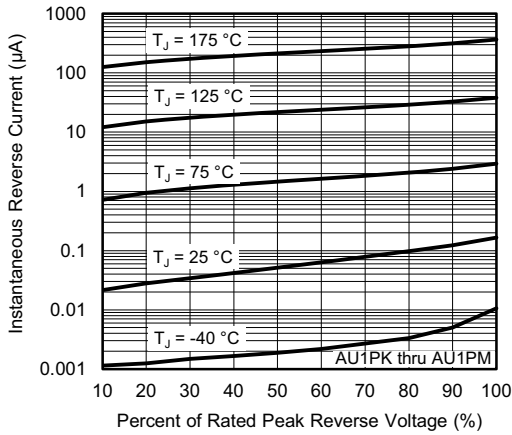


Fig. 7 - Typical Reverse Characteristics

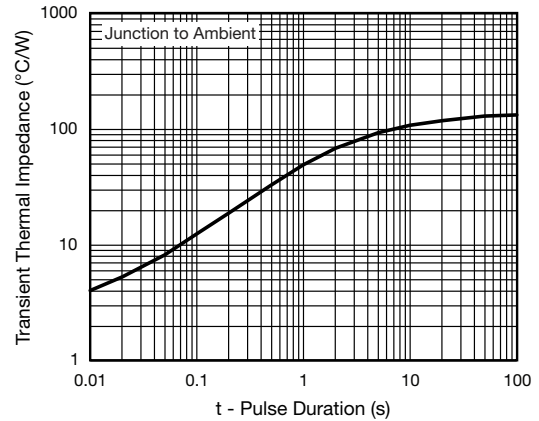


Fig. 9 - Typical Transient Thermal Impedance

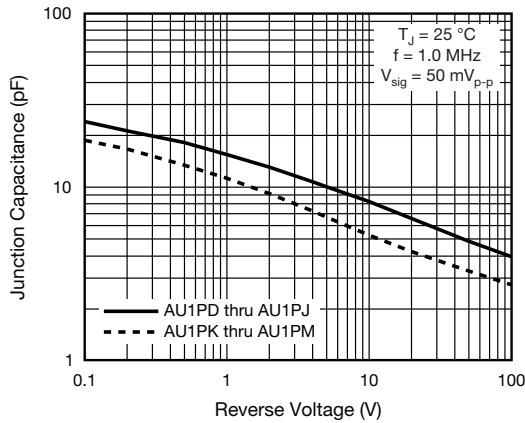
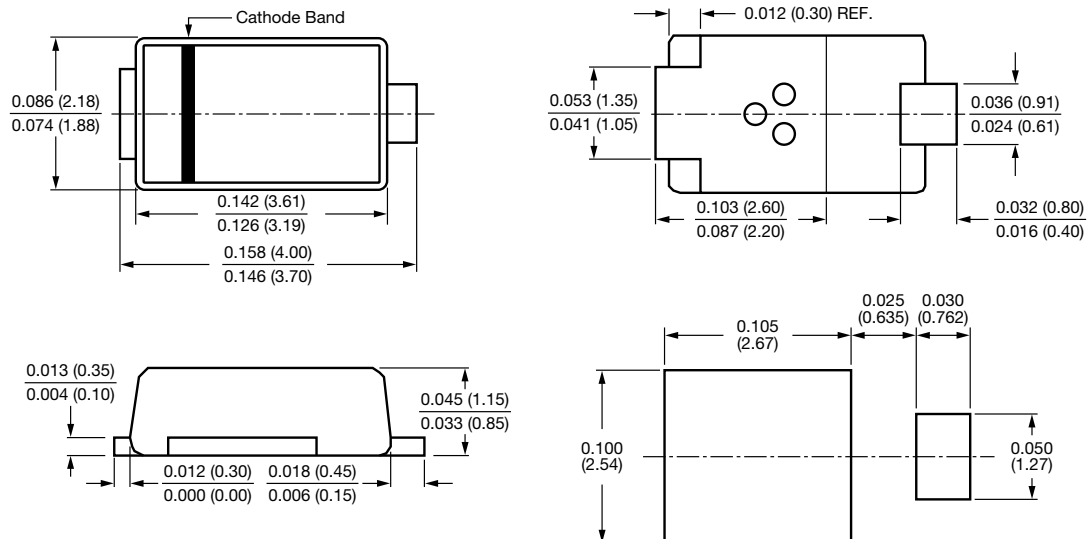


Fig. 8 - Typical Junction Capacitance

## PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

### SMP (DO-220AA)





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