



ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)						
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT
Maximum instantaneous forward voltage	I _F = 0.5 A	T _J = 25 °C	V _F (1)	0.41	-	V
	I _F = 1.0 A			0.48	0.55	
	I _F = 0.5 A	T _J = 125 °C		0.32	-	
	I _F = 1.0 A			0.41	0.46	
Maximum reverse current	Rated V _R	T _J = 25 °C	I _R (2)	8.5	200	μA
		T _J = 125 °C		4.5	15	mA
Typical junction capacitance	4.0 V, 1 MHz		C _J	50	-	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	MSS1P3	MSS1P4	UNIT
Typical thermal resistance	R _{θJA} (1)	125		°C/W
	R _{θJL} (1)	30		
	R _{θJC} (1)	40		

Note

- (1) Thermal resistance from junction to ambient and junction to lead mounted on PCB with 6.0 mm x 6.0 mm copper pad areas R_{θJL} is measured at the terminal of cathode band. R_{θJC} is measured at the top center of the body

ORDERING INFORMATION (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
MSS1P4-M3/89A	0.006	89A	4500	7" diameter plastic tape and reel
MSS1P4HM3_A/H (1)	0.006	H	4500	7" diameter plastic tape and reel

Note

- (1) AEC-Q101 qualified

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

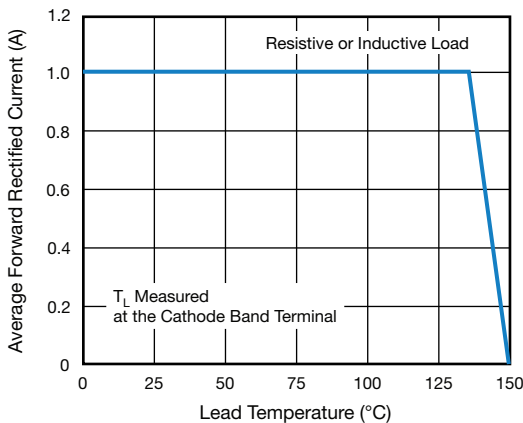


Fig. 1 - Maximum Forward Current Derating Curve

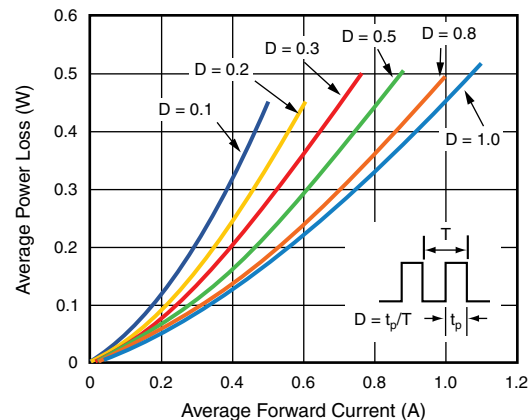


Fig. 2 - Forward Power Loss Characteristics

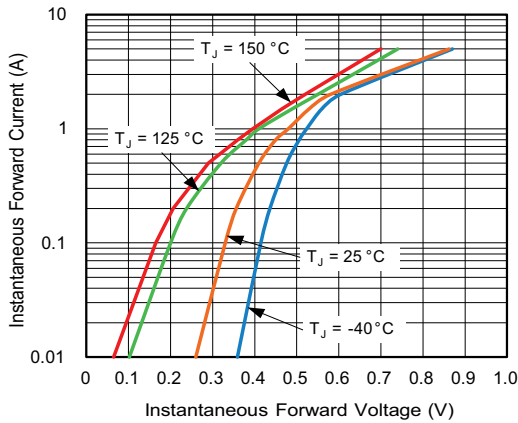


Fig. 3 - Typical Instantaneous Forward Characteristics

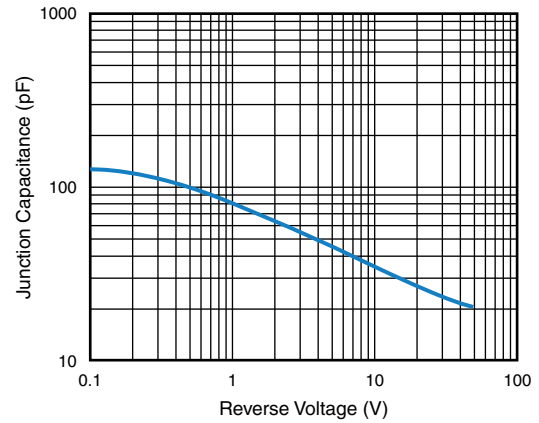


Fig. 5 - Typical Junction Capacitance

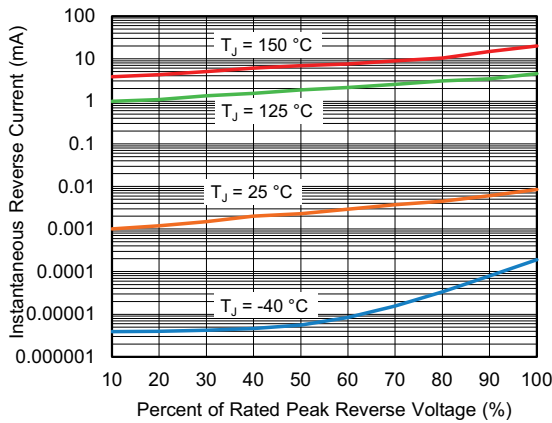


Fig. 4 - Typical Reverse Characteristics

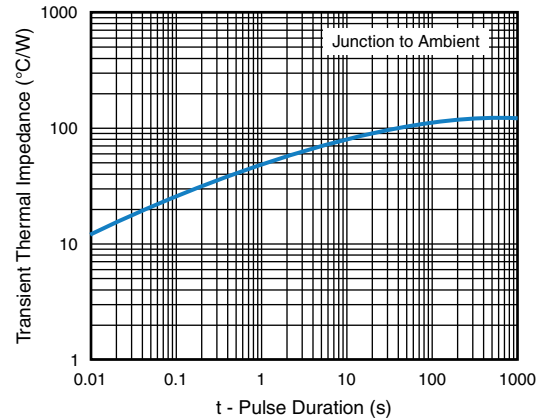
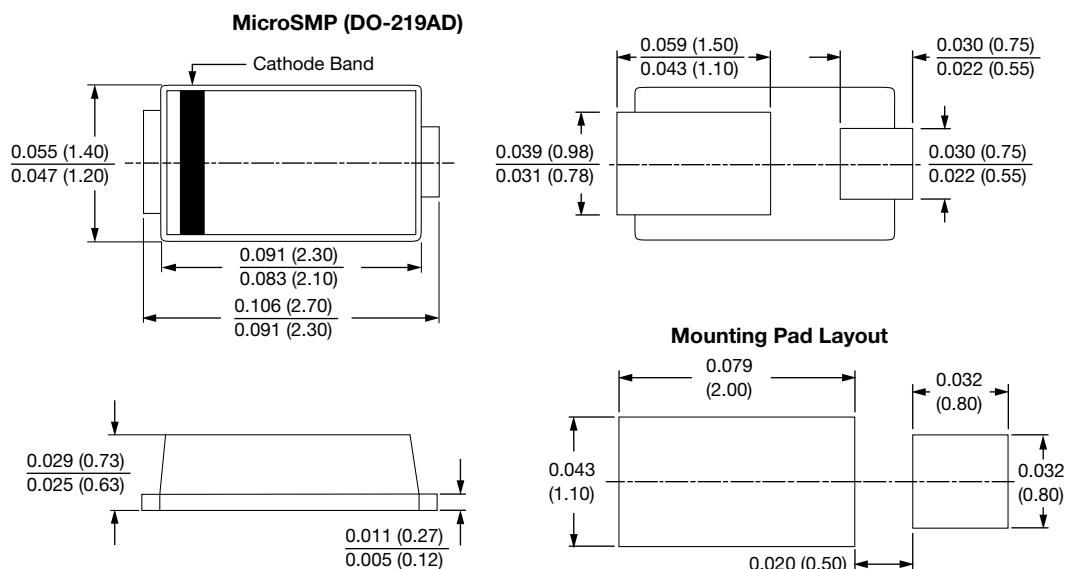


Fig. 6 - Typical Transient Thermal Impedance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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