

**ELECTRICAL CHARACTERISTICS** ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	TYP.	MAX.	UNIT	
Maximum instantaneous forward voltage	$I_F = 3\text{ A}$	$V_F^{(1)}$	$T_J = 25\text{ }^\circ\text{C}$	0.71	0.78	V
			$T_J = 125\text{ }^\circ\text{C}$	0.61	0.65	
Maximum reverse current at rated V_R		$I_R^{(2)}$	$T_J = 25\text{ }^\circ\text{C}$	-	100	μA
			$T_J = 125\text{ }^\circ\text{C}$	2.0	10	mA
Typical junction capacitance	4.0 V, 1 MHz	C_J	80		pF	

Notes

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
(2) Pulse test: Pulse width $\leq 40\text{ ms}$

THERMAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise specified)

PARAMETER	SYMBOL	SS3P6	UNIT
Typical thermal resistance ⁽¹⁾	$R_{\theta JA}^{(1)}$	115	$^\circ\text{C/W}$
	$R_{\theta JL}^{(1)}$	15	
	$R_{\theta JC}^{(1)}$	20	

Note

- (1) Thermal resistance from junction to ambient and junction to lead mounted on PCB with 15 mm x 15 mm copper pad areas. $R_{\theta JL}$ is measured at the terminal of cathode band. $R_{\theta JC}$ 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
SS3P6-M3/84A	0.024	84A	3000	7" diameter plastic tape and reel
SS3P6-M3/85A	0.024	85A	10 000	13" diameter plastic tape and reel
SS3P6HM3/84A ⁽¹⁾	0.024	84A	3000	7" diameter plastic tape and reel
SS3P6HM3/85A ⁽¹⁾	0.024	85A	10 000	13" diameter plastic tape and reel

Note

- (1) Automotive grade

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

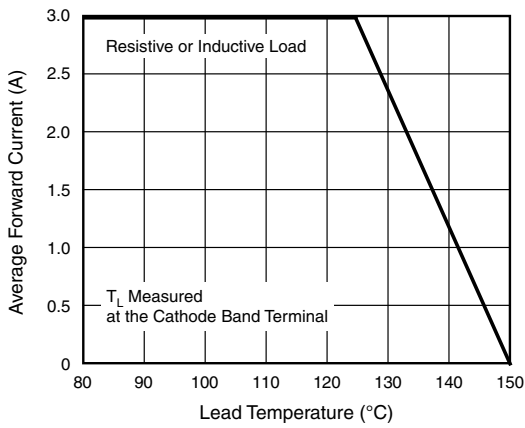


Fig. 1 - Forward Current Derating Curve

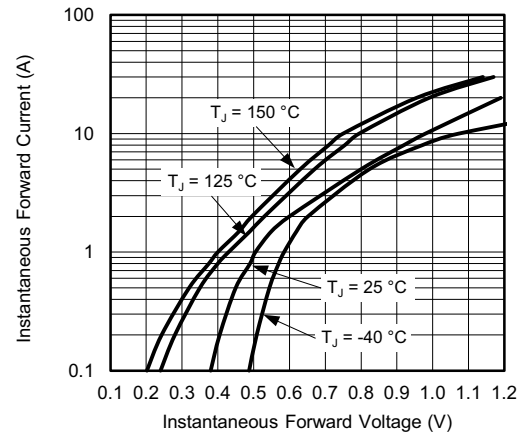


Fig. 4 - Typical Instantaneous Forward Characteristics

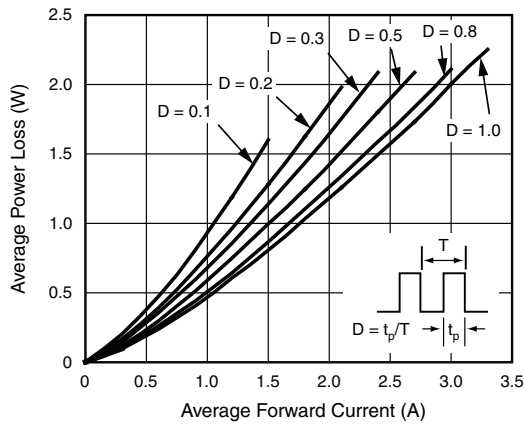


Fig. 2 - Forward Power Loss Characteristics

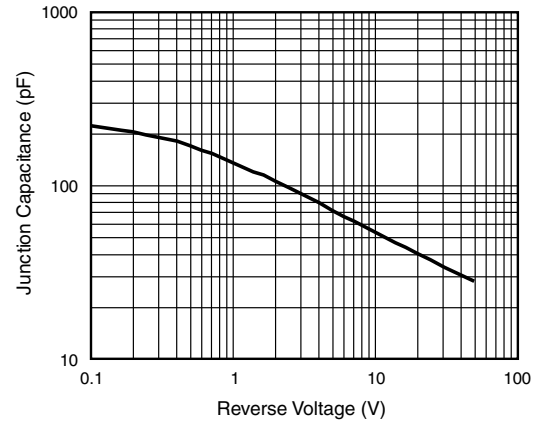


Fig. 5 - Typical Junction Capacitance

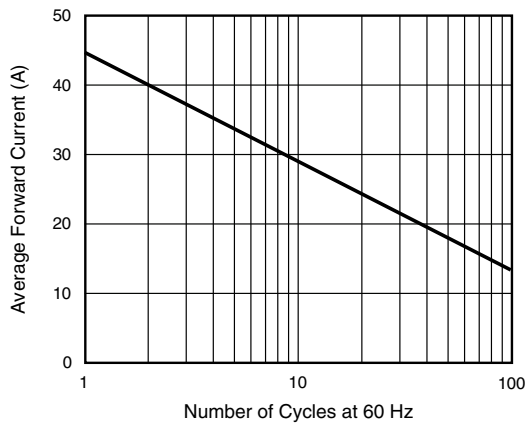


Fig. 3 - Maximum Non-Repetitive Peak Forward Surge Current

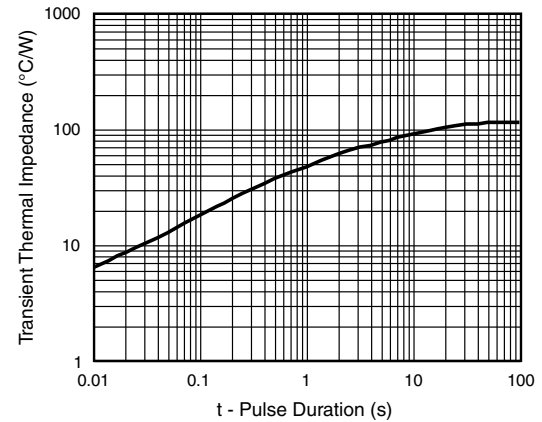


Fig. 6 - Typical Transient Thermal Impedance

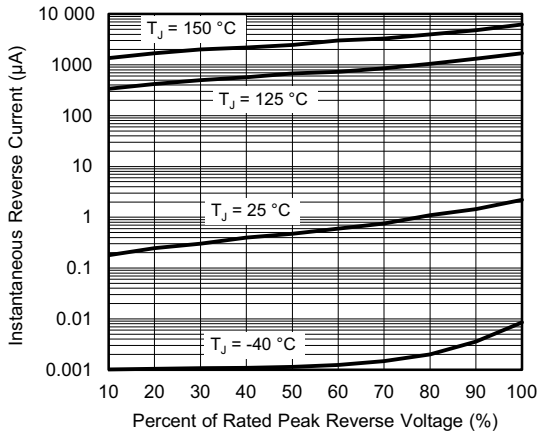
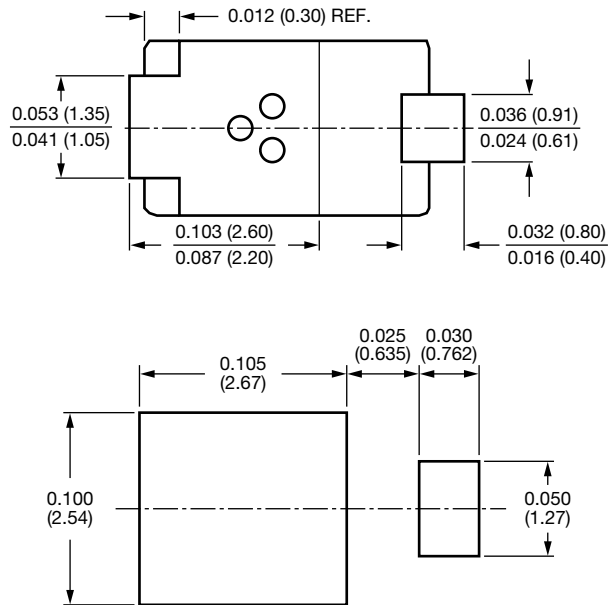
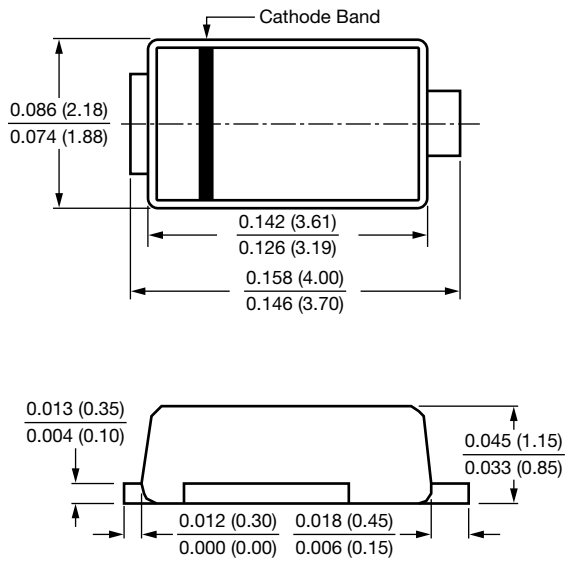


Fig. 7 - Typical Reverse Leakage Characteristics

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

SMP (DO-220AA)





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