



ELECTRICAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)						
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT
Instantaneous forward voltage	I <sub>F</sub> = 5 A	T <sub>A</sub> = 25 °C	V <sub>F</sub> <sup>(1)</sup>	0.41	-	V
	I <sub>F</sub> = 10 A			0.48	0.56	
	I <sub>F</sub> = 5 A	T <sub>A</sub> = 125 °C		0.31	-	
	I <sub>F</sub> = 10 A			0.41	0.49	
Reverse current	Rated V <sub>R</sub>	T <sub>A</sub> = 25 °C	I <sub>R</sub> <sup>(2)</sup>	100	800	μA
		T <sub>A</sub> = 125 °C		50	100	mA
Typical junction capacitance	4.0 V, 1 MHz		C <sub>J</sub>	750	-	pF

**Notes**(1) Pulse test: 300  $\mu\text{s}$  pulse width, 1 % duty cycle(2) Pulse test: Pulse width  $\leq 40\text{ ms}$ 

THERMAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise specified)				
PARAMETER	SYMBOL	SS10P3	SS10P4	UNIT
Typical thermal resistance	R <sub>θJA</sub> <sup>(1)</sup>	60		°C/W
	R <sub>θJL</sub>	3		

**Note**

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

ORDERING INFORMATION (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
SS10P4-M3/86A	0.10	86A	1500	7" diameter plastic tape and reel
SS10P4-M3/87A	0.10	87A	6500	13" diameter plastic tape and reel
SS10P4HM3/86A <sup>(1)</sup>	0.10	86A	1500	7" diameter plastic tape and reel
SS10P4HM3/87A <sup>(1)</sup>	0.10	87A	6500	13" diameter plastic tape and reel

**Note**

(1) Automotive grade

## RATINGS AND CHARACTERISTICS CURVES

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

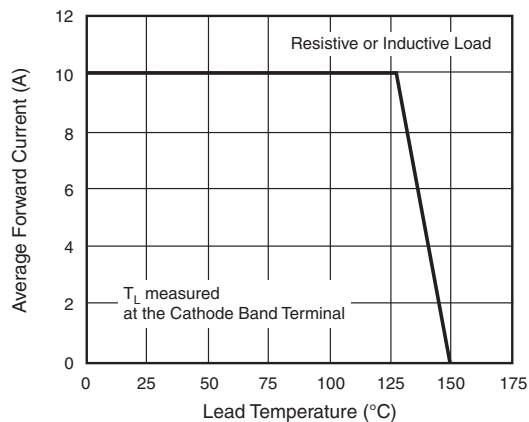


Fig. 1 - Maximum Forward Current Derating Curve

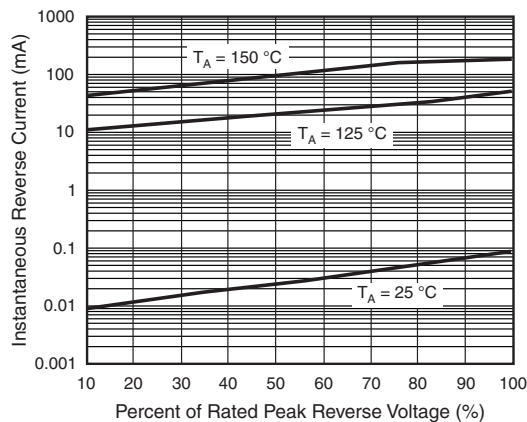


Fig. 4 - Typical Reverse Leakage Characteristics

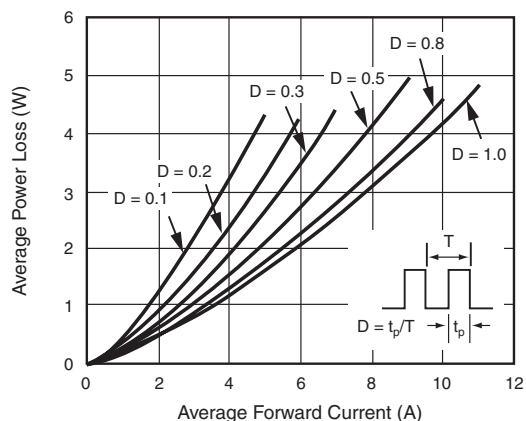


Fig. 2 - Forward Power Loss Characteristics

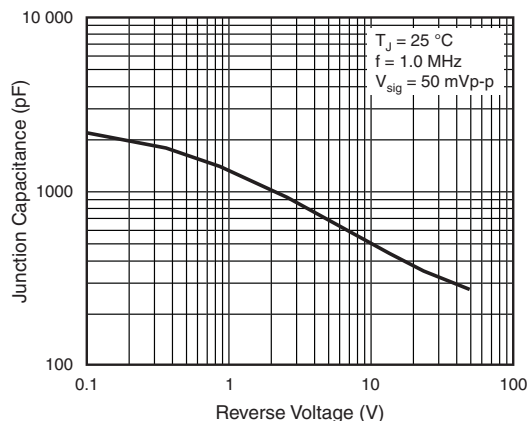


Fig. 5 - Typical Junction Capacitance

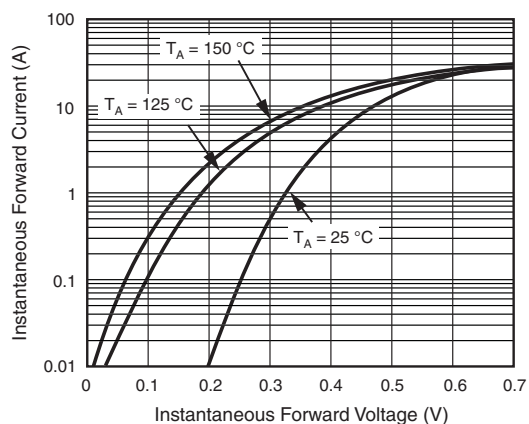


Fig. 3 - Typical Instantaneous Forward Characteristics

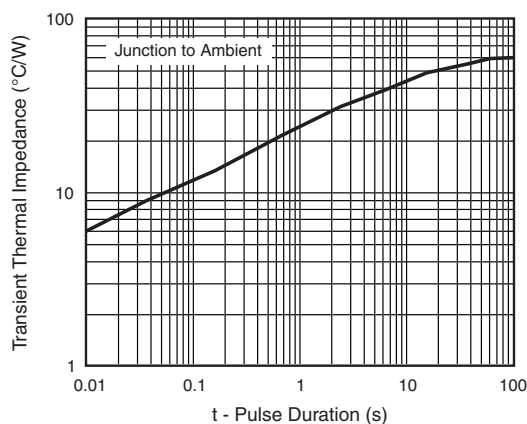
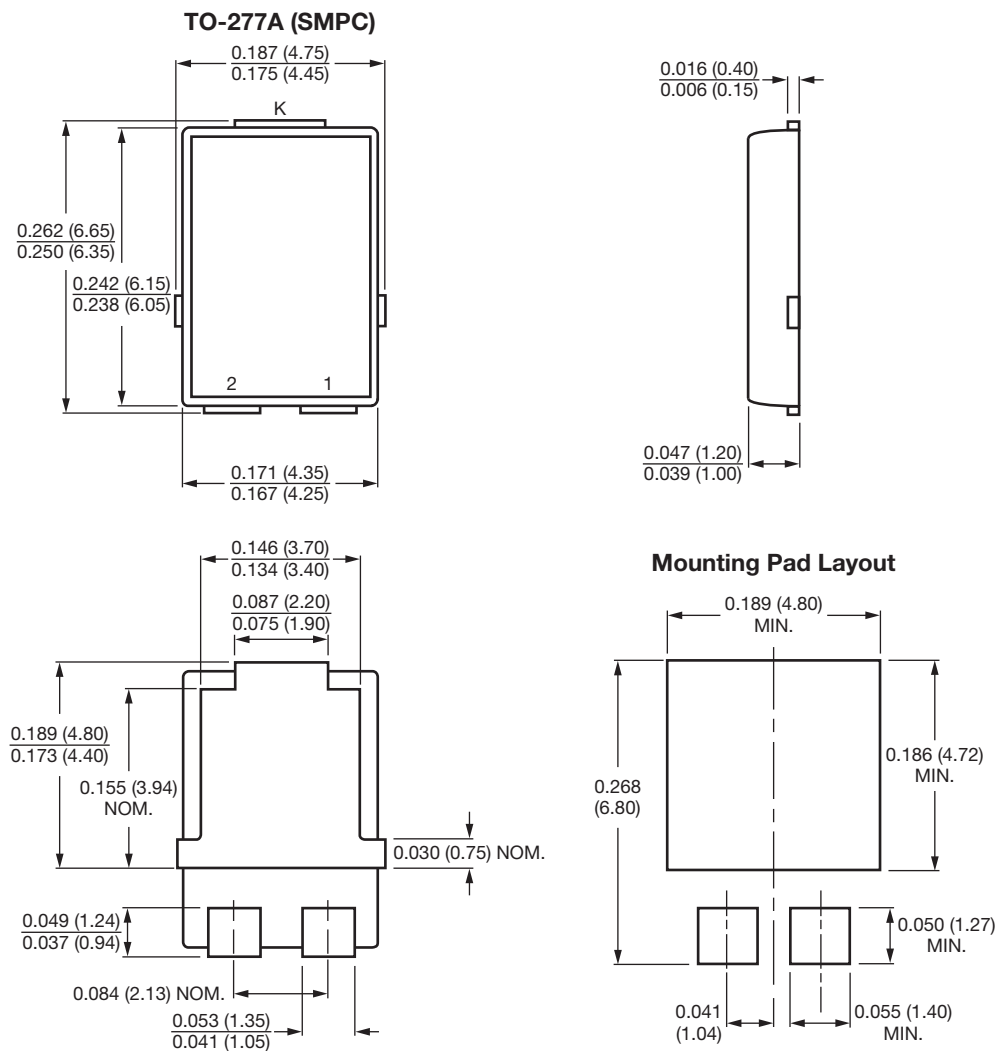


Fig. 6 - Typical Transient Thermal Impedance



**PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)





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