



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

**Note:**

(1) Pulse test: 300 μs pulse width, 1 % duty cycle

THERMAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)				
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 P.C.B. 1 oz. pad layout

ORDERING INFORMATION (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
SS10P4-E3/86A	0.10	86A	1500	7" diameter plastic tape and reel
SS10P4-E3/87A	0.10	87A	6500	13" diameter plastic tape and reel
SS10P4HE3/86A <sup>(1)</sup>	0.10	86A	1500	7" diameter plastic tape and reel
SS10P4HE3/87A <sup>(1)</sup>	0.10	87A	6500	13" diameter plastic tape and reel

**Note:**

(1) Automotive grade AEC Q101 qualified

**RATINGS AND CHARACTERISTICS CURVES**

(T<sub>A</sub> = 25 °C unless otherwise noted)

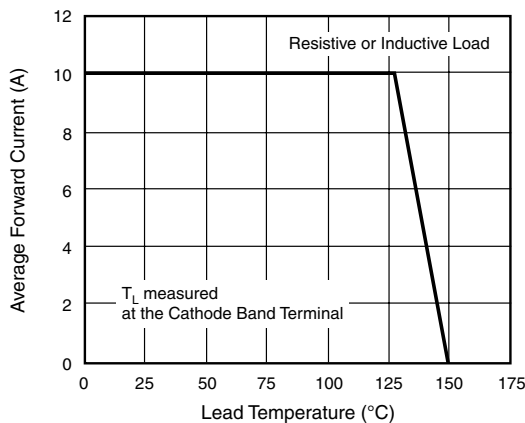


Figure 1. Maximum Forward Current Derating Curve

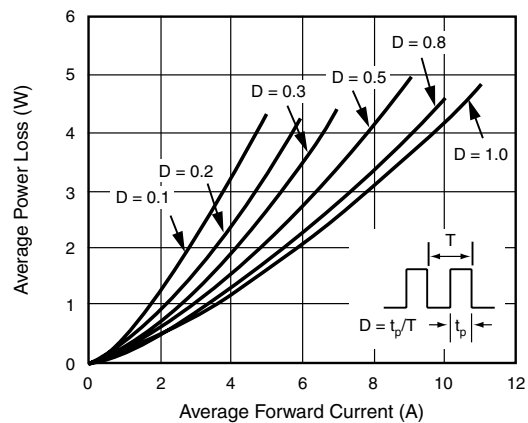


Figure 2. Forward Power Loss Characteristics

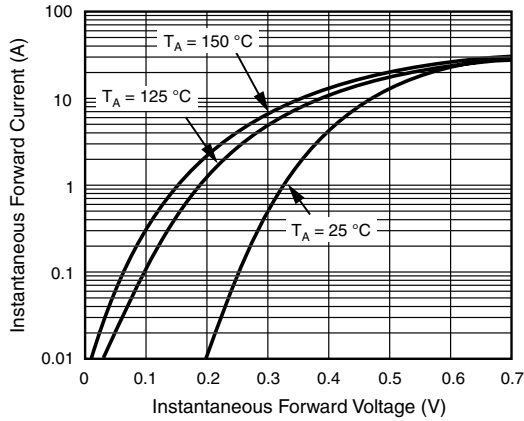


Figure 3. Typical Instantaneous Forward Characteristics

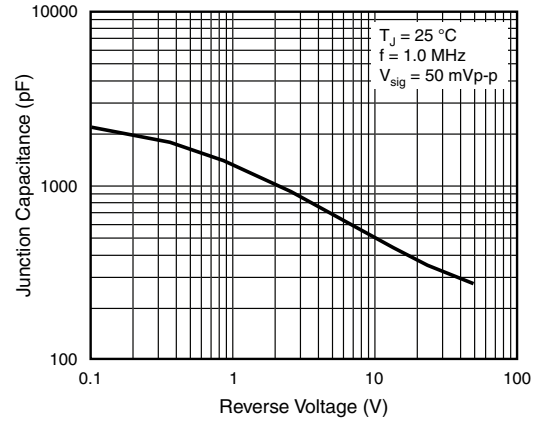


Figure 5. Typical Junction Capacitance

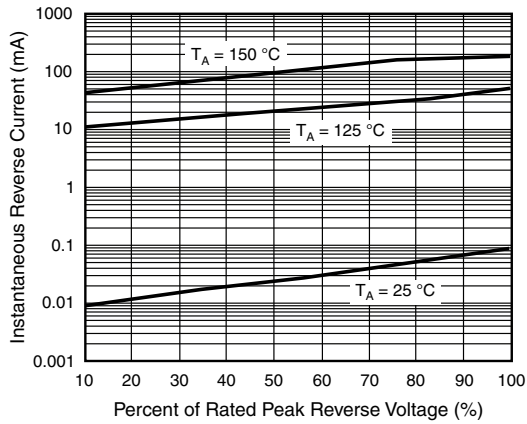


Figure 4. Typical Reverse Leakage Characteristics

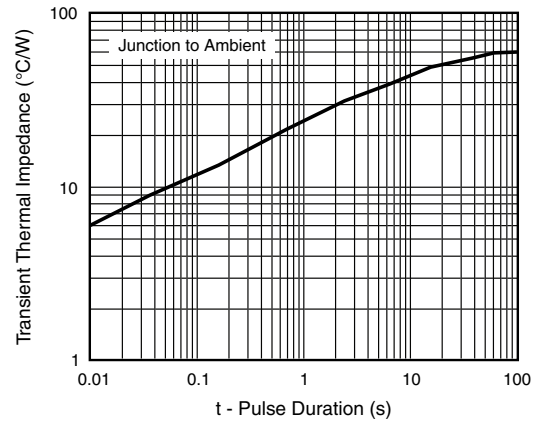
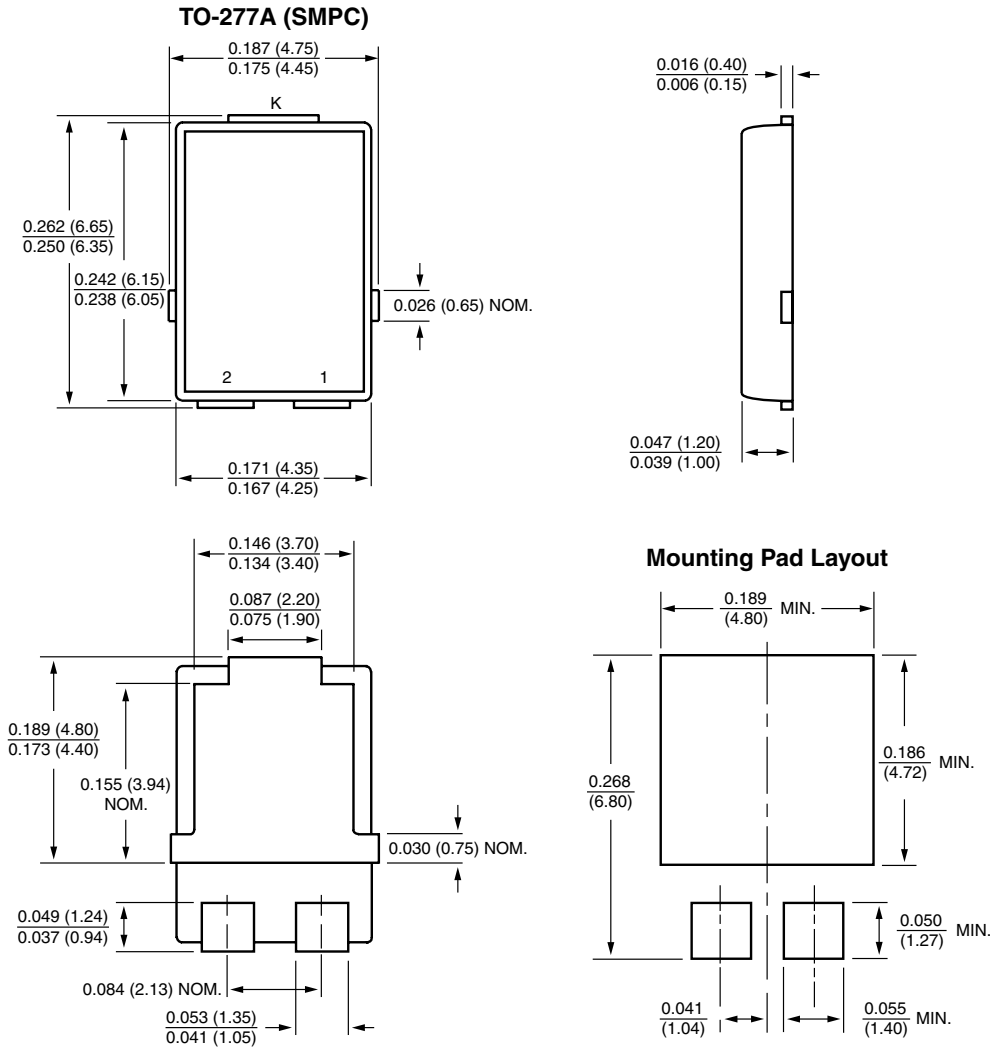


Figure 6. Typical Transient Thermal Impedance



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



Conform to JEDEC TO-277A



## Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.