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## IMBD4148-V

### **Vishay Semiconductors**

ELECTRICAL CHARACTERISTICS (T <sub>amb</sub> = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	I <sub>F</sub> = 10 mA	V <sub>F</sub>			1.0	V
Leakage current	V <sub>R</sub> = 70 V	I <sub>R</sub>			2.5	μA
	V <sub>R</sub> = 70 V, Tj = 150 °C	I <sub>R</sub>			50	μA
	V <sub>R</sub> = 25 V, Tj = 150 °C	I <sub>R</sub>			30	μA
Diode capacitance	$V_F = V_R = 0$	CD			4	pF
Reverse recovery time (see figures)	$I_F$ = 10 mA to $i_R$ = 1 mA, $V_R$ = 6 V, $R_L$ = 100 $\Omega$	t <sub>rr</sub>			4	ns

#### LAYOUT FOR R<sub>thJA</sub> TEST

Thickness:

Fiberglass 1.5 mm (0.059 inches) Copper leads 0.3 mm (0.012 inches)



TYPICAL CHARACTERISTICS (Tamb = 25 °C, unless otherwise specified)



Fig. 1 - Forward Current vs. Forward Voltage



Fig. 2 - Dynamic Forward Resistance vs. Forward Current

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Fig. 3 - Admissible Power Dissipation vs. Ambient Temperature



Fig. 4 - Relative Capacitance vs. Reverse Voltage



Fig. 6 - Admissible Repetitive Peak Forward Current vs. Pulse Duration



Fig. 5 - Leakage Current vs. Junction Temperature

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#### PACKAGE DIMENSIONS in millimeters (inches): SOT-23







Foot print recommendation:



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