



Vishay Semiconductors

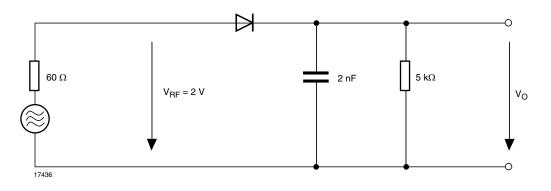
THERMAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)								
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT				
Thermal resistance junction to ambient air ⁽¹⁾		R _{thJA}	650	K/W				
Junction temperature		Tj	150					
Operating temperature range		Tj	- 55 to + 150	°C				
Storage temperature range		T _{stg}	- 65 to + 150					

Note

⁽¹⁾ Valid provided that electrodes are kept at ambient temperature

ELECTRICAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)							
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT	
Forward voltage	I _F = 10 mA	V _F			1000		
	I _F = 100 mA	V _F			1200	mV	
Leakage current	V _R = 20 V	I _R			25	nA	
	V _R = 75 V	I _R			5	μA	
	V _R = 100 V	I _R			100		
	$V_R = 20 \text{ V}, \text{ T}_j = 150 ^\circ\text{C}$	I _R			50		
Diode capacitance	$V_F = V_R = 0 V$	CD			4	pF	
Voltage rise when switching ON	Tested with 50 mA pulses, $t_p = 0.1 \ \mu s$, rise time < 30 ns, $f_p = (5 \text{ to } 100) \text{ kHz}$	V _{fr}			2.5	v	
Reverse recovery time	$I_F = 10 \text{ mA}, i_R = 1 \text{ mA}, V_R = 6 \text{ V}, \\ R_L = 100 \ \Omega$	t _{rr}			4	ns	
Rectification efficiency	$f = 100 \text{ MHz}, V_{RF} = 2 \text{ V}$	ην	0.45				

RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT





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TYPICAL CHARACTERISTICS ($T_{amb} = 25$ °C, unless otherwise specified)

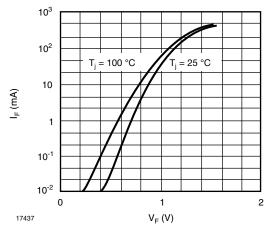


Fig. 1 - Forward Characteristics

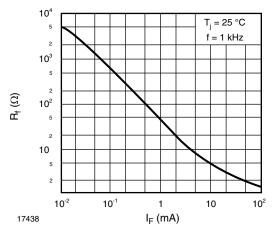


Fig. 2 - Dynamic Forward Resistance vs. Forward Current

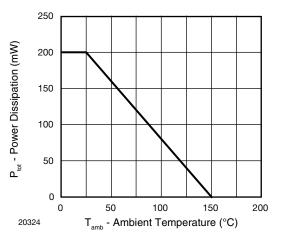


Fig. 3 - Admissible Power Dissipation vs. Ambient Temperature

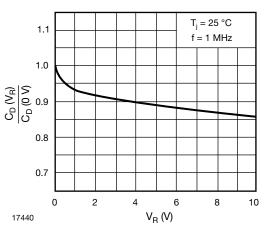


Fig. 4 - Relative Capacitance vs. Reverse Voltage

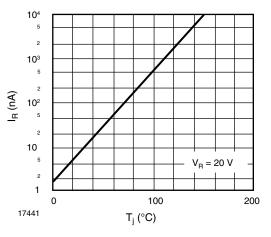
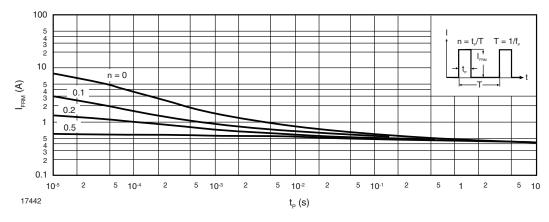


Fig. 5 - Leakage Current vs. Junction Temperature

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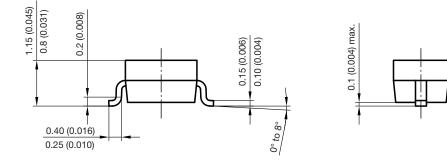


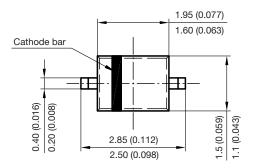




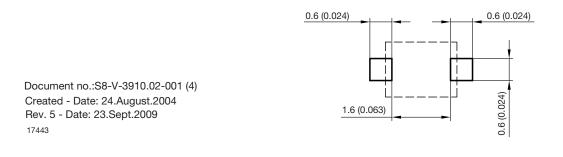
PACKAGE DIMENSIONS in millimeters (inches): SOD-323

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Foot print recommendation:



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4

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