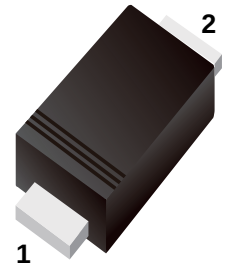
Switching Diodes

■ Features

- Fast Switching Speed
- For General Purpose Switching Applications.
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion

■ MARKING: W1



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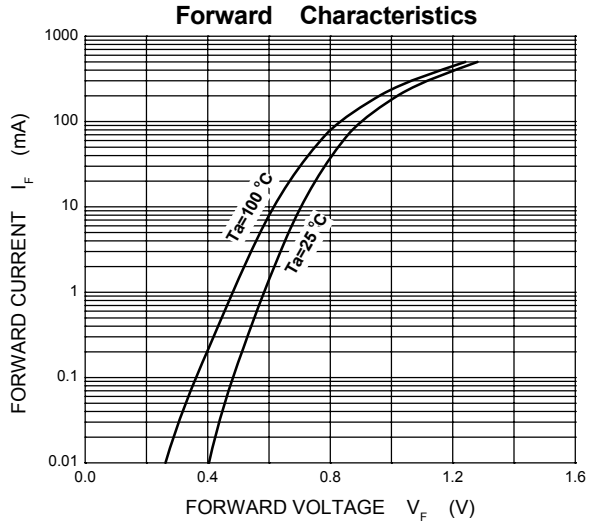
Absolute Maximum Ratings Ta = 25℃

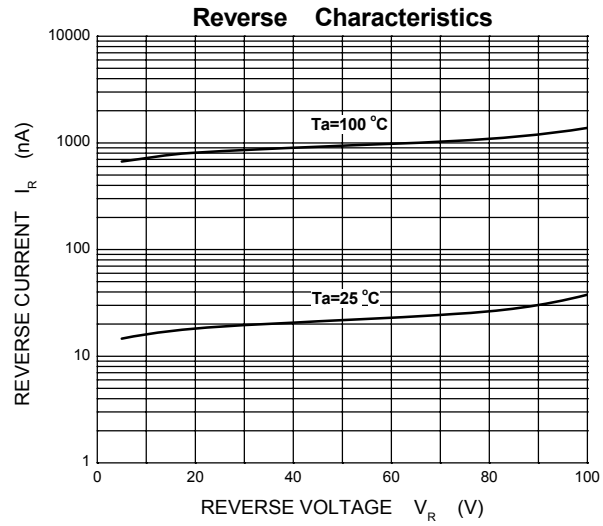
Parameter	Symbol	Rating	Unit
Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	100	
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	71	
Average Rectified Output Current	I_O	150	mA
Forward Continuous Current	I_{FM}	300	
Peak Forward Surge Current @ t=1us	I_{FSM}	2	A
@ t =1s		1	
Power Dissipation	P_d	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250	℃/W
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{stg}	-55 to 150	

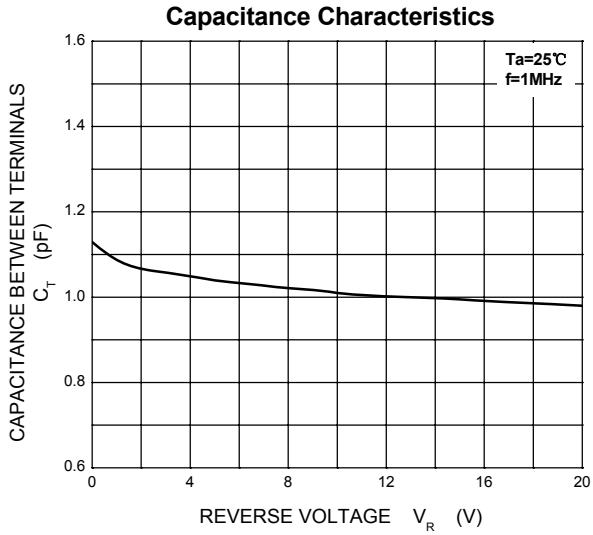
Electrical Characteristics Ta = 25℃

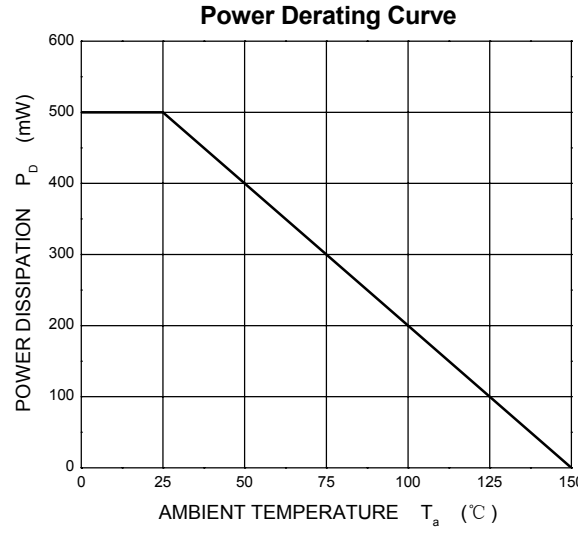
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	I_R= 100uA	100			V
Forward voltage	V_{F1}	I_F= 1mA			0.715	
	V_{F2}	I_F= 10 mA			0.855	
	V_{F3}	I_F= 50 mA			1	
	V_{F4}	I_F= 150 mA			1.25	
Reverse voltage leakage current	I_{R1}	V_R= 75 V			1	uA
	I_{R2}	V_R=20 V			25	nA
Junction capacitance	C_j	V_R= 0 V, f= 1 MHz			2	pF
Reverse recovery time	t_{rr}	I_F=I_R=10mA,Irr=0.1xI_R, R_L=100Ω			4	ns

Typical Characterisitics









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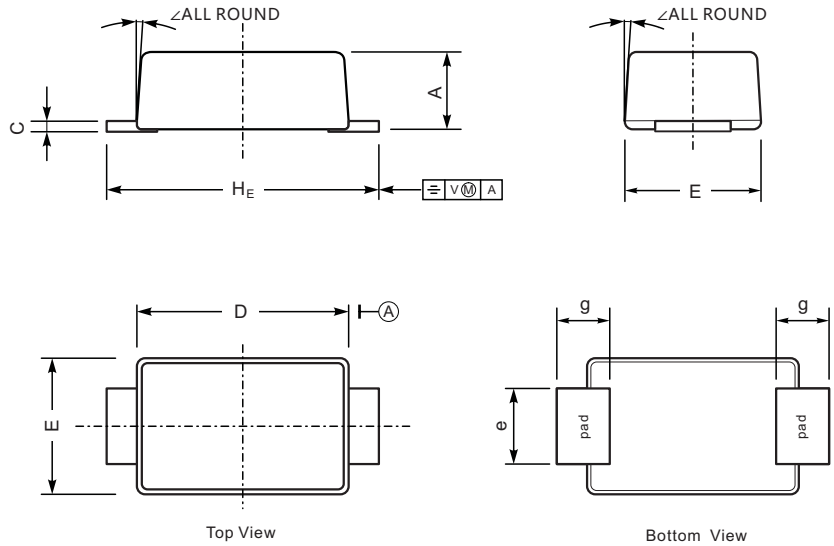

UNIT		A	C	D	E	e	g	H_E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	