

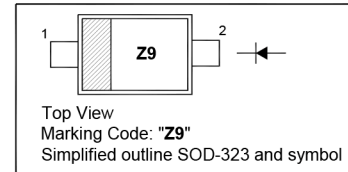
SILICON SCHOTTKY DIODE

Features

- High current rectifier Schottky diode with very low V_F drop
- For power supply applications
- For clamping and protection in low voltage applications
- For detection and step-up-conversion

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	10	V
Forward Current	I_F	3	A
Non-repetitive Peak Surge Forward Current ($t \leq 10\text{ ms}$)	I_{FSM}	5	A
Total Power Dissipation	P_{tot}	1350	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Operating Temperature Range	T_{op}	- 55 to + 125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^{\circ}\text{C}$

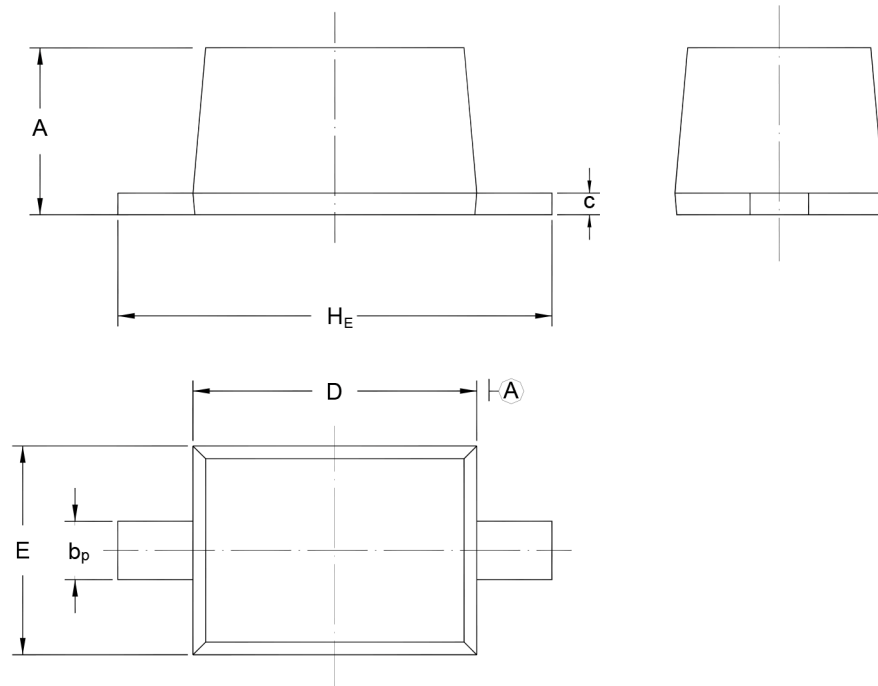
Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$ at $I_F = 100\text{ mA}$ at $I_F = 500\text{ mA}$ at $I_F = 1000\text{ mA}$	V_F	0.2 0.26 0.32 0.36	0.3 0.38 0.5 0.6	V
Reverse Current at $V_R = 5\text{ V}$ at $V_R = 8\text{ V}$ at $V_R = 5\text{ V}$, $T_a = 80\text{ }^{\circ}\text{C}$ at $V_R = 8\text{ V}$, $T_a = 80\text{ }^{\circ}\text{C}$	I_R	- - - -	15 25 800 1500	μA
Total Capacitance at $V_R = 5\text{ V}$, $f = 1\text{ MHz}$	C_T	12	30	pF

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

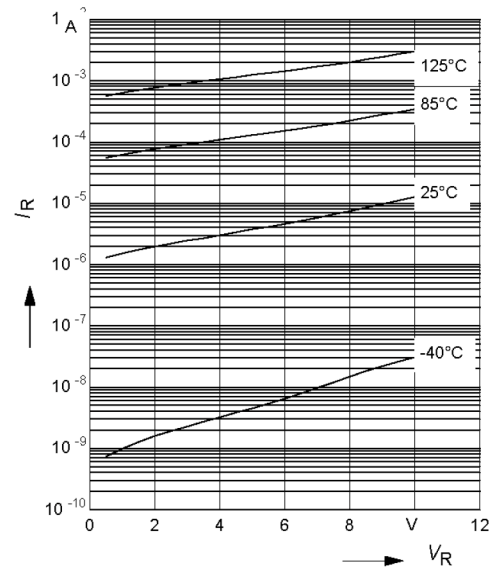
SOD-323



UNIT	A	b _p	C	D	E	H _E
mm	1.10 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30

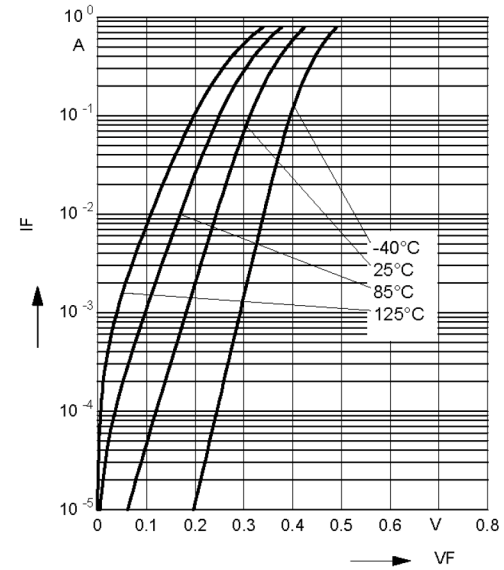
Reverse current $I_R = f(V_R)$

T_A = Parameter



Forward current $I_F = f(V_F)$

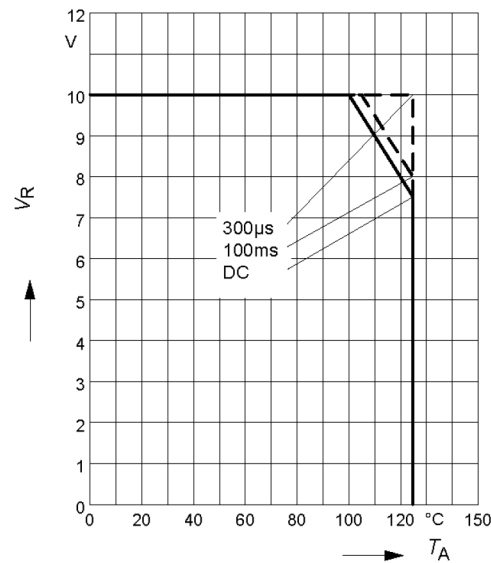
T_A = Parameter



Permissible Reverse voltage $V_R = f(T_A)$

t_p = Parameter; duty cycle < 0.01

Device mounted on PCB with $R_{th} = 160 \text{ K/W}$



Forward current $I_F = f(T_S)$

