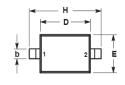
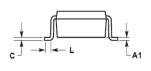


### SILICON EPITAXIAL PLANAR SWITCHING DIODE

### **Features**

- Small plastic package suitable for surface mounted design.
- High reliability with high surge current handling capability.
- Marking Code:A







SOD-323				
Dim.	Min.	Max.		
Α	0.80	1.10		
A1	0.00	0.10		
А3	0.15 REF			
В	0.25	0.40		
С	0.10	0.15		
D	1.60	1.80		
E	1.15	1.35		
L	0.20	0.50		
Н	2.30	2.80		
Dimensions in millimeter				

Maximum Ratings @ T<sub>A</sub> = 25°C unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	90	V
DC Reverse Voltage	V <sub>R</sub>	80	V
Mean Rectifying Current	Io	100	mA
Peak Forward Current	I <sub>FM</sub>	225	mA
Surge Current (1 s)	I <sub>surge</sub>	500	mA
Junction Temperature	T <sub>j</sub>	125	°C
Storage Temperature Range	T <sub>stg</sub>	- 55 to + 125	°C

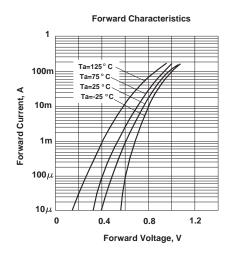
# Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

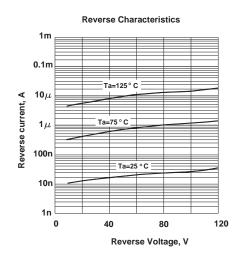
Parameter	Symbol		Unit
Forward Voltage at I <sub>F</sub> = 100 mA	$V_{F}$	1.2	V
Reverse Current at V <sub>R</sub> = 80 V	I <sub>R</sub>	0.1	μA
Capacitance between Terminals at $V_R = 0.5 \text{ V}$ , $f = 1 \text{ MHz}$	Ст	3	pF
Reverse Recovery Time at $V_R$ = 6 V, $I_F$ = 10 mA, $R_L$ = 100 $\Omega$	t <sub>rr</sub>	4	n



### SILICON EPITAXIAL PLANAR SWITCHING DIODE

### **TYPICAL TRANSIENT CHARACTERISTICS**



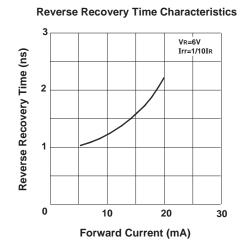


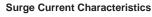
# characteristics 10 2 0.2

0.1

0

Capacitance between terminals



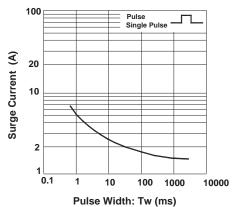


8

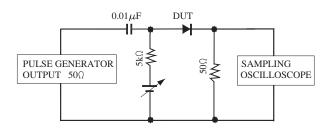
Reverse Voltage, VR (V)

12

14



Reverse Recovery Time Measurement Circuit



http://www.hc-semi.com



### SILICON EPITAXIAL PLANAR SWITCHING DIODE

## **IMPORTANT NOTICE**

HC-SEMI reserves the right to make changes without further notice to any products herein.

HC-SEMI makes no warranty, representation or guarantee regarding

The suitability of its products for any particular purpose, nor does HC-SEMI assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation consequential or incidental damages.

"Typical" parameters can and do vary in different applications. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts.

HC-SEMI products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the HC-SEMI product could create a situation where personal injury or death may occur.

Should Buyer purchase or use HC-SEMI products for any such unintended or unauthorized application, Buyer shall indemnify and hold HC-SEMI and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that HC-SEMI was negligent regarding the design or manufacture of the part.