



CYStech Electronics Corp.

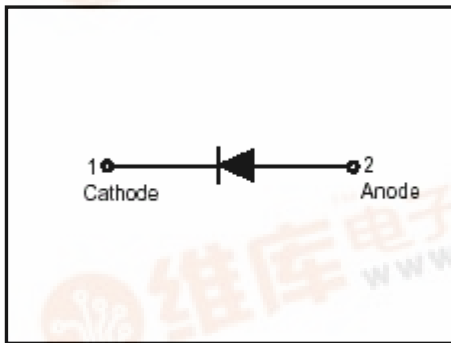
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# High Speed Switching diode 1SS400C2

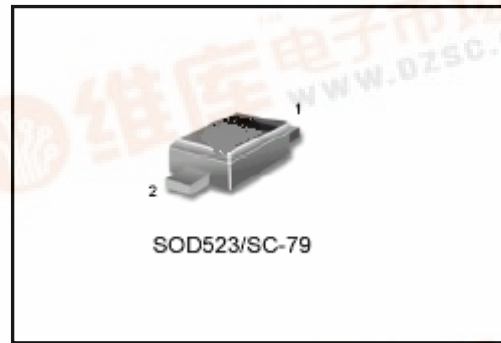
## Features

- Extremely small surface mounting type.(SC-79/SOD523)
- High speed switching applications
- Low reverse current

## Symbol



## Outline



## Absolute Maximum Ratings

- Maximum Temperatures
  - Storage Temperature  $T_{stg}$  ..... -55~+150°C
  - Junction Temperature  $T_j$  ..... +150°C
- Maximum Voltages and Currents ( $T_a=25^\circ\text{C}$ )
  - DC Reverse Voltage  $V_R$  ..... 100 V
  - Mean Rectifying Current  $I_F$  ..... 200mA
  - Peak Forward Surge Current  $I_{FSM}$  ..... 500mA
- Thermal Characteristics
  - Total Device Dissipation @  $T_A=25^\circ\text{C}$  (Note)  $P_D$  ..... 200mW
  - Thermal Resistance, Junction to Ambient  $R_{\theta JA}$  ..... 625°C/W

Note: FR-5 board minimum pad.



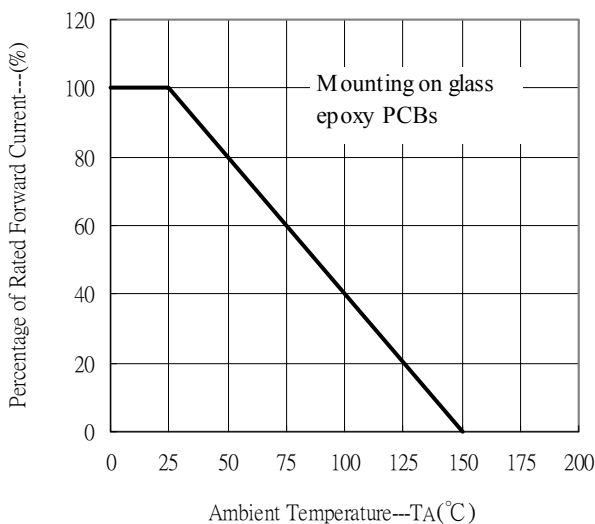


**Characteristics (Ta=25°C)**

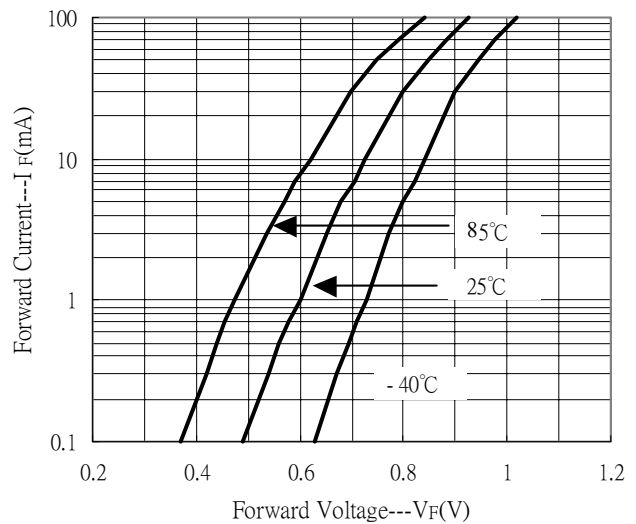
Characteristic	Symbol	Condition	Min.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =100mA	-	1.2	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =80V	-	0.1	μA
Diode Capacitance	C <sub>D</sub>	V <sub>R</sub> =0.5V, f=1MHz	-	3	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA	-	4	ns

**Characteristic Curves**

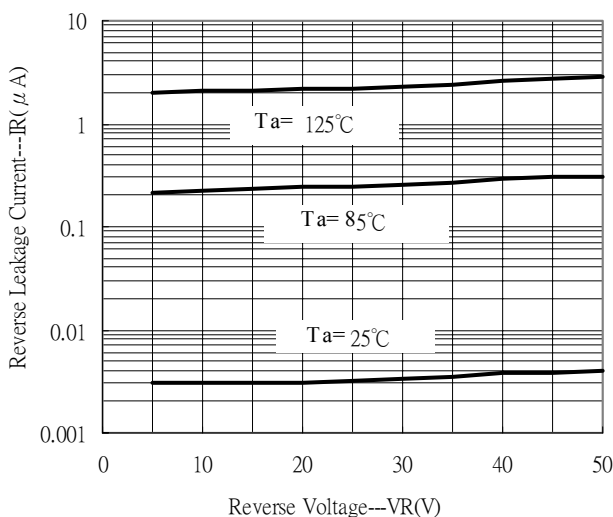
Forward Current Derating Curve



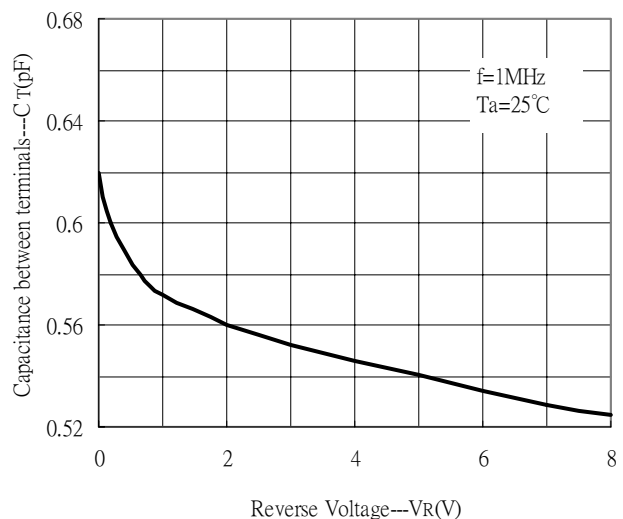
Forward Current vs Forward Voltage



Reverse Leakage Current vs Reverse Voltage

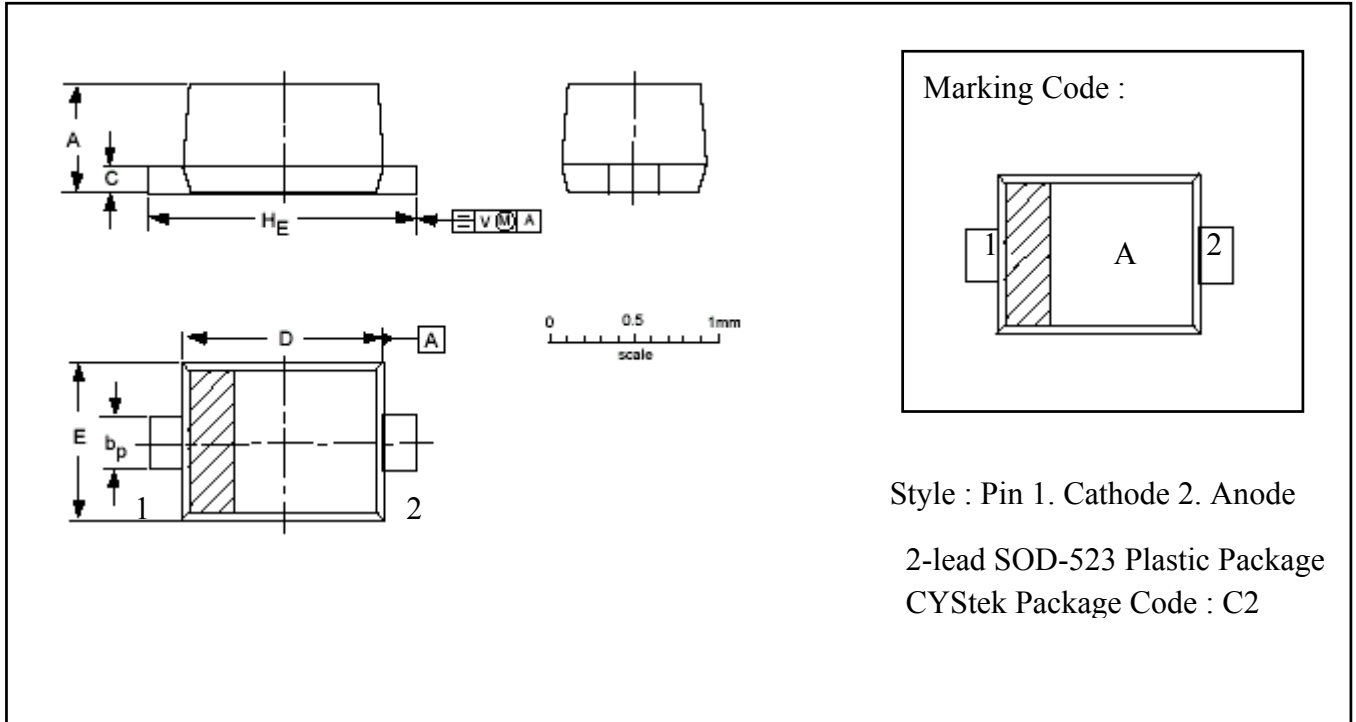


Capacitance vs Reverse Voltage





**SOD-523 Dimension**



\*: Typical

DIM	Millimeters		DIM	Millimeters	
	Min	Max.		Min.	Max.
A	0.5	0.7	E	0.7	0.9
bp	0.25	0.35	HE	1.5	1.7
c	0.1	0.2	V	0.15(typ)	
D	1.1	1.3			

Notes: 1. Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.  
 2. If there is any question with packing specification or packing method, please contact your local CYStek sales office.

**Material:**

- Lead: 42 Alloy; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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