



**CHENMKO ENTERPRISE CO.,LTD**

*Lead free devices*

**SURFACE MOUNT**  
SCHOTTKY BARRIER DIODE  
VOLTAGE 45 Volts CURRENT 0.1 Ampere

**CH501S-40PT**

**APPLICATION**

- \* Low power rectification

**FEATURE**

- \* Small surface mounting type. (SC-79/SOD-523)
- \* Low VF. (VF=0.43V Typ. at 100mA)
- \* High reliability

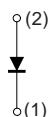
**CONSTRUCTION**

- \* Silicon epitaxial planar

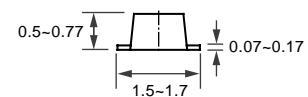
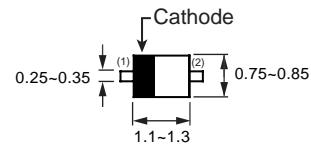
**MARKING**

- \* A

**CIRCUIT**



**SC-79/SOD-523**



Dimensions in millimeters

**SC-79/SOD-523**

**MAXIMUM RATINGS ( At TA = 25°C unless otherwise noted )**

| RATINGS  | SYMBOL           | CH501S-40PT | UNITS |
|--|------------------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage                       | V <sub>RRM</sub> | 45          | Volts |
| Maximum RMS Voltage  | V <sub>RMS</sub> | 32          | Volts |
| Maximum DC Blocking Voltage                                  | V <sub>D</sub>   | 40          | Volts |
| Maximum Average Forward Rectified Current                    | I <sub>o</sub>   | 0.1         | Amps  |
| Peak Forward Surge Current at 8.3 mSec single half sine-wave | I <sub>FSM</sub> | 1.0         | Amps  |
| Typical Junction Capacitance between Terminal (Note 1)       | C <sub>J</sub>   | 6.0         | pF    |
| Maximum Operating Temperature Range                          | T <sub>J</sub>   | +125        | °C    |
| Storage Temperature Range                                    | T <sub>STG</sub> | -40 to +125 | °C    |

**ELECTRICAL CHARACTERISTICS ( At TA = 25°C unless otherwise noted )**

| CHARACTERISTICS  | SYMBOL             | CH501S-40PT | UNITS |
|--|--------------------|-------------|-------|
| Maximum Instantaneous Forward Voltage at I <sub>F</sub> (1)= 10mA  | V <sub>F</sub> (1) | 0.34        | Volts |
| Maximum Instantaneous Forward Voltage at I <sub>F</sub> (2)= 100mA | V <sub>F</sub> (2) | 0.55        | Volts |
| Maximum Average Reverse Current at V <sub>R</sub> = 10V            | I <sub>R</sub>     | 30          | uAmps |

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 10.0 volts.  
2. ESD sensitive product handling required.

2002-5

## RATING CHARACTERISTIC CURVES ( CH501S-40PT )

FIG. 1 - FORWARD CHARACTERISTICS

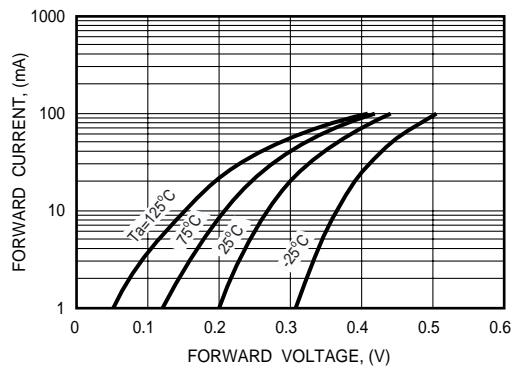


FIG. 2 - REVERSE CHARACTERISTICS

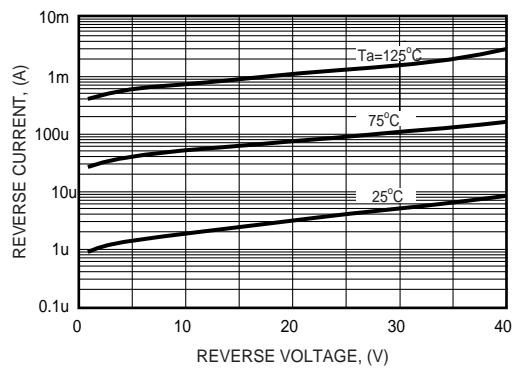


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

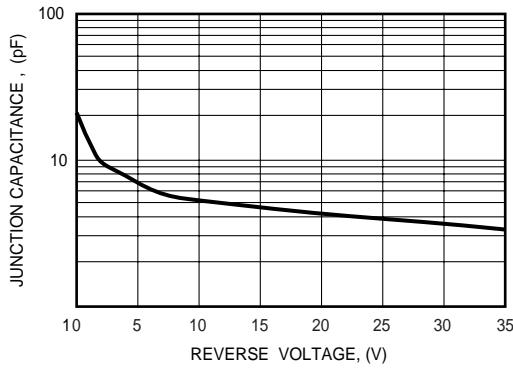


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

