



**CHENMKO ENTERPRISE CO.,LTD**

**CH301H-40PT**

**SURFACE MOUNT**

**SCHOTTKY BARRIER DIODE**

**VOLTAGE 40 Volts CURRENT 0.12 Ampere**

*Lead free devices*

**APPLICATION**

- \* High speed switching for detection
- \* Voltage clamping
- \* Protection circuit

**FEATURE**

- \* Small surface mounting type. (SC-76/SOD-323)
- \* Low VF and low IR
- \* High reliability
- \* Low diode capacitance

**CONSTRUCTION**

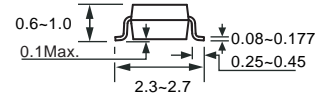
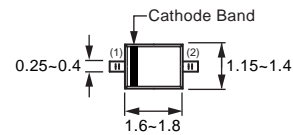
- \* Silicon epitaxial planar

**MARKING**

- \* JL



**SC-76/SOD-323**



Dimensions in millimeters

**SC-76/SOD-323**

**CIRCUIT**



**MAXIMUM RATINGS** ( At  $T_A = 25^{\circ}\text{C}$  unless otherwise noted )

RATINGS	SYMBOL	CH301H-40PT	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	Volts
Maximum RMS Voltage	$V_{RMS}$	28	Volts
Maximum DC Blocking Voltage	$V_{DC}$	40	Volts
Maximum Average Forward Rectified Current	$I_o$	0.12	Amps
Repetitive Peak Forward Current at $T_P \leq 1 \text{ Sec } \phi \leq 0.5$	$I_{FRM}$	0.12	Amps
Non-Repetitive Peak Forward Current at $T_P < 10 \text{ mSec}$	$I_{FSM}$	0.2	Amps
Typical Junction Capacitance between Terminal (Note 1)	$C_J$	5.0	pF
Typical Thermal Resistance from junction to ambient	$R_{\theta JA}$	450	$^{\circ}\text{C/W}$
Maximum Operating and Storage Temperature Range	$T_{J,TSTG}$	-65 to +150	$^{\circ}\text{C}$

**ELECTRICAL CHARACTERISTICS** ( At  $T_A = 25^{\circ}\text{C}$  unless otherwise noted )

CHARACTERISTICS	SYMBOL	CH301H-40PT	UNITS
Maximum Instantaneous Forward Voltage	$I_F = 1\text{mA}$	$V_{F1}$	300
	$I_F = 10\text{mA}$	$V_{F2}$	380
	$I_F = 100\text{mA}$	$V_{F3}$	550
Maximum Average Reverse Current	$V_R = 30\text{V}$	$I_{R1}$	1.0
	$V_R = 40\text{V}$	$I_{R2}$	5.0

NOTES : 1. Measured at 1.0 MHz and reverse voltage of 0 volts.  
2. ESD sensitive product handling required.

2002-01

## RATING CHARACTERISTIC CURVES ( CH301H-40PT )

FIG. 1 - FORWARD CHARACTERISTICS

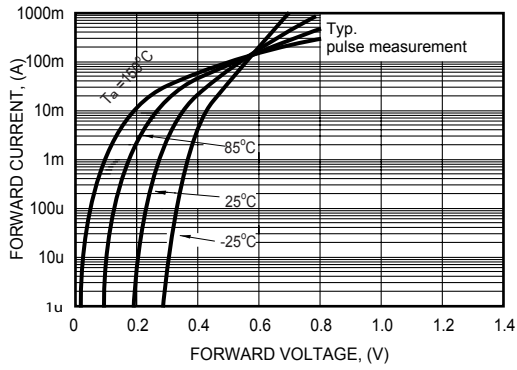


FIG. 2 - REVERSE CHARACTERISTICS

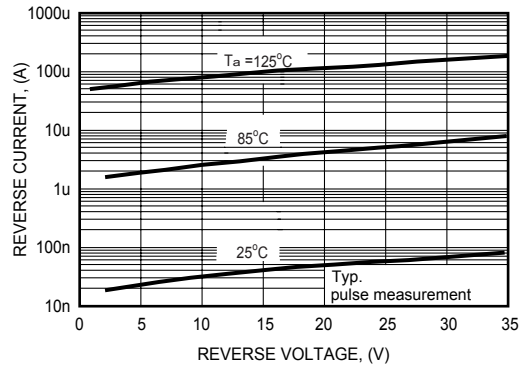


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

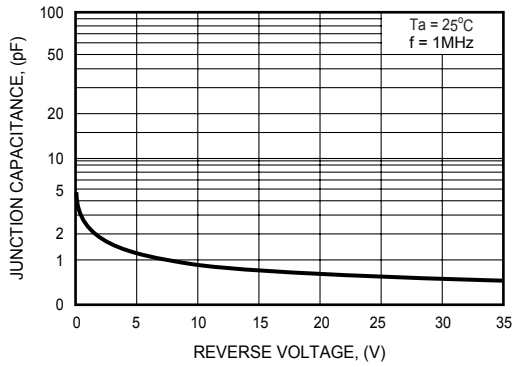


FIG. 4 - DIFFERENTIAL FORWARD RESISTANCE

