



# CHENMKO ENTERPRISE CO.,LTD

## SURFACE MOUNT

### SCHOTTKY BARRIER RECTIFIER

VOLTAGE 40 Volts CURRENT 350 mAmpere

**CH340RDWPT**

*Lead free devices*

#### APPLICATION

- \* Ultra high speed switching

#### FEATURE

- \* Small surface mounting type. (SC-88/SOT-363)
- \* High speed. (TRR=10nSec Typ.)
- \* Suitable for high packing density.
- \* Maximum total power dissipation is 200mW.

#### CONSTRUCTION

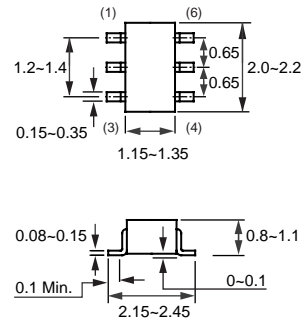
- \* Silicon epitaxial planar

#### MARKING

- \* RD1



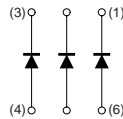
SC-88/SOT-363



Dimensions in millimeters

SC-88/SOT-363

#### CIRCUIT



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

| RATINGS   | SYMBOL                | CH340RDWPT  | UNITS |
|---|-----------------------|-------------|-------|
| Maximum Non-Repetitive Peak Reverse Voltage             | V <sub>RM</sub>       | 40          | Volts |
| Maximum RMS Voltage                                     | V <sub>RMS</sub>      | 28          | Volts |
| Maximum Repetitive Peak Reverse and DC Blocking Voltage | V <sub>RRM, VDC</sub> | 40          | Volts |
| Forward Continuous Current                              | I <sub>FM</sub>       | 350         | mAmps |
| Non-Repetitive Peak Forward Surge Current at 10mSec     | I <sub>FSM</sub>      | 1.0         | Amps  |
| Typical Junction Capacitance between Terminal (Note 1)  | C <sub>J</sub>        | 50          | pF    |
| Maximum Reverse Recovery Time (Note 2)                  | T <sub>RR</sub>       | 10          | nSec  |
| Thermal Resistance Junction to Ambient (Note 3)         | R <sub>θJA</sub>      | 500         | °C/W  |
| Maximum Operating and Storage Temperature Range         | T <sub>J, TSTG</sub>  | -65 to +125 | °C    |

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

| CHARACTERISTICS  | SYMBOL         | CH340RDWPT | UNITS  |
|--|----------------|------------|--------|
| Maximum Instantaneous Forward Voltage<br>@ I <sub>F</sub> =20mA<br>@ I <sub>F</sub> =100mA | V <sub>F</sub> | 370<br>500 | mVolts |
| Maximum Average Reverse Current<br>@ V <sub>R</sub> =10V<br>@ V <sub>R</sub> =30V          | I <sub>R</sub> | 2.0<br>5.0 | uAmps  |

- NOTES :
1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.
  2. Measured at applied forward current of 200mA and reverse current of 200mA.
  3. Device mounted on FR-4 by 1 inch X 0.85 inch X 0.062 inch
  4. ESD sensitive product handling required.

2004-06

## RATING CHARACTERISTIC CURVES ( CH340RDWPT)

FIG. 1 - TYPICAL POWER DERATING CURVE

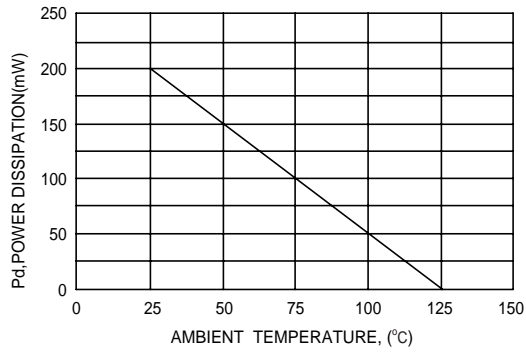


FIG. 2 - FORWARD CHARACTERISTICS

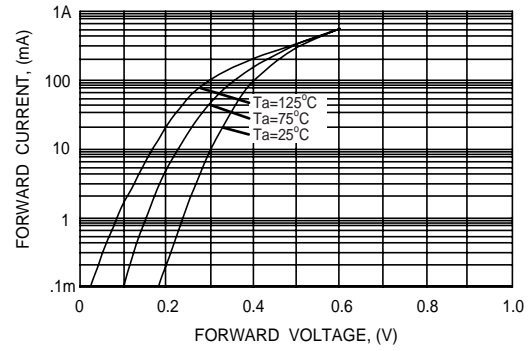


FIG. 3 - REVERSE CHARACTERISTICS

