



# CHENMKO ENTERPRISE CO.,LTD

Lead free devices

## SURFACE MOUNT

SCHOTTKY BARRIER DIODE

VOLTAGE 30 Volts CURRENT 0.1 Ampere

CH531UPT

### APPLICATION

- \* High speed switching

### FEATURE

- \* Small surface mounting type. (SC-88/SOT-363)
- \* Low VF and low IR
- \* Three diodes in parallel installation

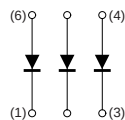
### CONSTRUCTION

- \* Silicon epitaxial planar

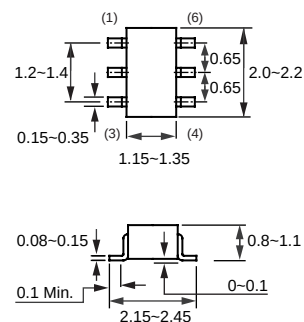
### MARKING

- \* BZ

### CIRCUIT



SC-88/SOT-363



Dimensions in millimeters

SC-88/SOT-363

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

| RATINGS                                                      | SYMBOL    | CH531UPT    | UNITS              |
|--------------------------------------------------------------|-----------|-------------|--------------------|
| Maximum Recurrent Peak Reverse Voltage                       | $V_{RRM}$ | 30          | Volts              |
| Maximum RMS Voltage                                          | $V_{RMS}$ | 21          | Volts              |
| Maximum DC Blocking Voltage                                  | $V_{DC}$  | 30          | Volts              |
| Maximum Average Forward Rectified Current                    | $I_O$     | 0.1         | Amps               |
| Peak Forward Surge Current at 8.3 mSec single half sine-wave | $I_{FSM}$ | 1.0         | Amps               |
| Typical Junction Capacitance between Terminal (Note 1)       | $C_J$     | 6.0         | pF                 |
| Maximum Operating Temperature Range                          | $T_J$     | +125        | $^{\circ}\text{C}$ |
| Storage Temperature Range                                    | $T_{STG}$ | -40 to +125 | $^{\circ}\text{C}$ |

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

| CHARACTERISTICS                                               | SYMBOL | CH531UPT | UNITS            |
|---------------------------------------------------------------|--------|----------|------------------|
| Maximum Instantaneous Forward Voltage at $I_F = 100\text{mA}$ | $V_F$  | 0.43     | Volts            |
| Maximum Average Reverse Current at $V_R = 10\text{V}$         | $I_R$  | 30       | $\mu\text{Amps}$ |

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

2003-5

RATING CHARACTERISTIC CURVES ( CH531UPT )

FIG. 1 - FORWARD CHARACTERISTICS

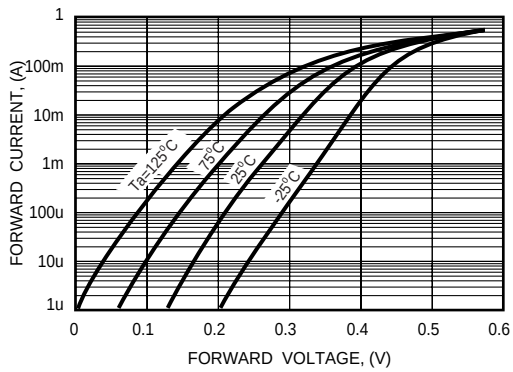


FIG. 2 - REVERSE CHARACTERISTICS

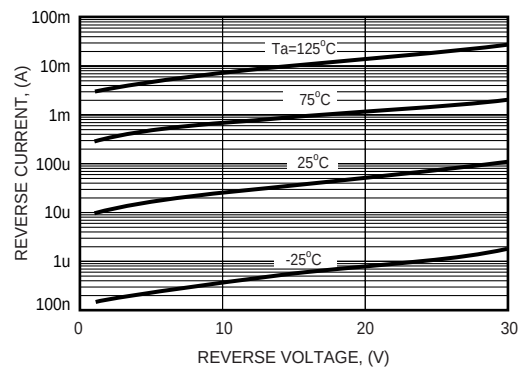


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

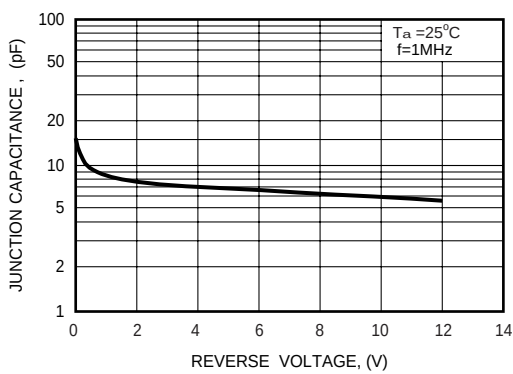


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

