



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT

SCHOTTKY BARRIER DIODE

VOLTAGE 30 Volts CURRENT 0.5 Ampere

CH451H-30GP

APPLICATION

* Low power rectification

FEATURE

- * Small surface mounting type. (SC-76/SOD-323)
- * Ultra low IR. (VF=0.55V Typ. at 0.5A)
- * High reliability

CONSTRUCTION

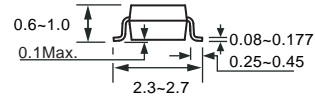
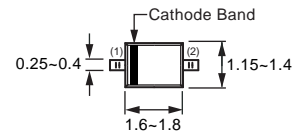
* Silicon epitaxial planar

MARKING

* SE



SC-76/SOD-323



Dimensions in millimeters

SC-76/SOD-323

CIRCUIT



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

| RATINGS | SYMBOL | CH451H-30GP | UNITS |
|--|--------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 30 | Volts |
| Maximum RMS Voltage | VRMS | 21 | Volts |
| Maximum DC Blocking Voltage | VDC | 30 | Volts |
| Maximum Average Forward Rectified Current | Io | 0.5 | Amps |
| Peak Forward Surge Current at 8.3 mSec single half sine-wave | IFSM | 2.0 | Amps |
| Typical Junction Capacitance between Terminal (Note 1) | CJ | 15 | pF |
| Maximum Operating Temperature Range | TJ | +125 | °C |
| Storage Temperature Range | TSTG | -40 to +125 | °C |

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

| CHARACTERISTICS | SYMBOL | CH451H-30GP | UNITS |
|---|----------------|-------------|-------|
| Maximum Instantaneous Forward Voltage | @ IF(1)= 100mA | VF(1) | 0.385 |
| | @ IF(2)= 500mA | VF(2) | 0.55 |
| Maximum Average Reverse Current at VR= 5.0V | @ TA= 25°C | IR(1) | 10 |
| | @ TA= 45°C | IR(2) | 40 |

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

2002-11

RATING CHARACTERISTIC CURVES (CH451H-30GP)

FIG. 1 - FORWARD CHARACTERISTICS

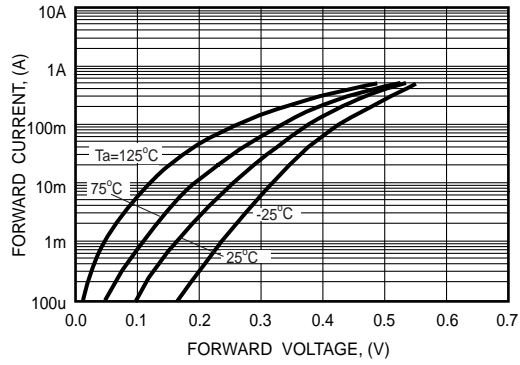


FIG. 2 - MAXIMUM REVERSE CHARACTERISTICS

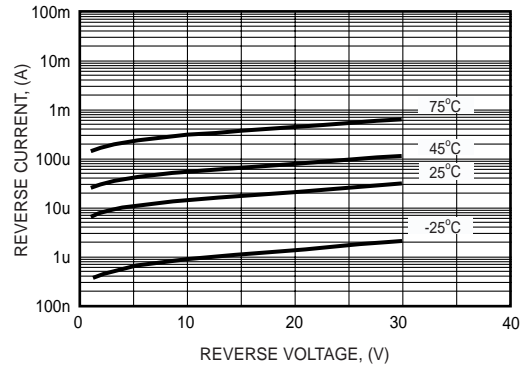


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

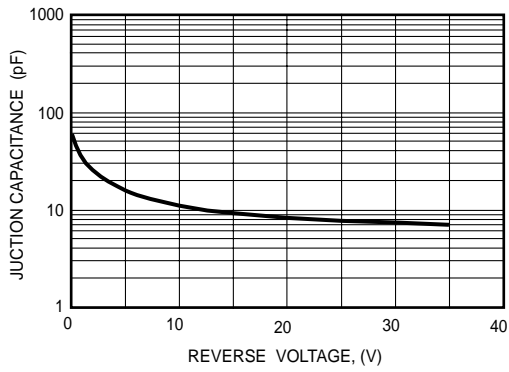


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

