



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

**SURFACE MOUNT
SWITCHING DIODE**

VOLTAGE 80 Volts CURRENT 0.1 Ampere

CHN202UGP

APPLICATION

- * Ultra high speed switching

FEATURE

- * Small surface mounting type. (SC-70/SOT-323)
- * High speed. (TRR=1.5nSec Typ.)
- * Suitable for high packing density.
- * Maximum total power dissipation is 200mW.
- * Peak forward current is 300mA.

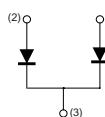
CONSTRUCTION

- * Silicon epitaxial planar

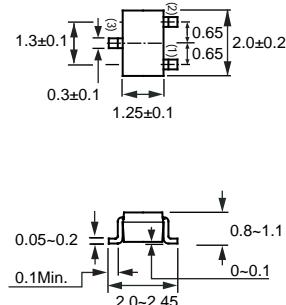
MARKING

- * MU

CIRCUIT



SC-70/SOT-323



Dimensions in millimeters

SC-70/SOT-323

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

| RATINGS | SYMBOL | CHN202UGP | UNITS |
|--|------------------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage | VR _{RM} | 80 | Volts |
| Maximum RMS Voltage | V _{RMS} | 56 | Volts |
| Maximum DC Blocking Voltage | V _D C | 80 | Volts |
| Maximum Average Forward Rectified Current | I _O | 0.1 | Amps |
| Peak Forward Surge Current at 1uSec. | I _{FSM} | 4.0 | Amps |
| Typical Junction Capacitance between Terminal (Note 1) | C _J | 3.5 | pF |
| Maximum Reverse Recovery Time (Note 2) | T _{RR} | 4.0 | nSec |
| Maximum Operating Temperature Range | T _J | +150 | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | °C |

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

| CHARACTERISTICS | SYMBOL | CHN202UGP | UNITS |
|---|----------------|-----------|-------|
| Maximum Instantaneous Forward Voltage at I _F = 100mA | V _F | 1.20 | Volts |
| Maximum Average Reverse Current at V _R = 70V | I _R | 0.1 | uAmps |

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 6.0 volts.
2. Measured at applied forward current of 5mA and reverse voltage of 6.0 volts.
3. ESD sensitive product handling required.

2002-5

RATING CHARACTERISTIC CURVES (CHN202UGP)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

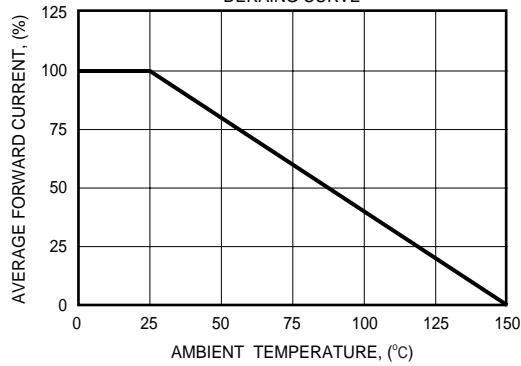


FIG. 2 - FORWARD CHARACTERISTICS

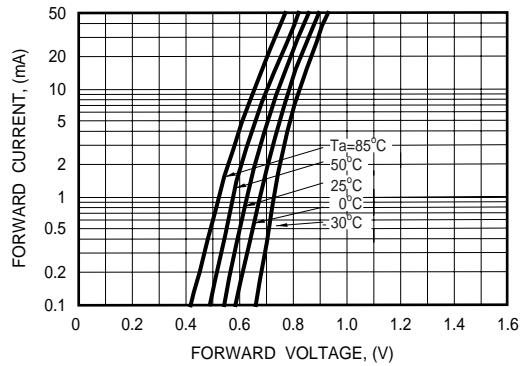


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

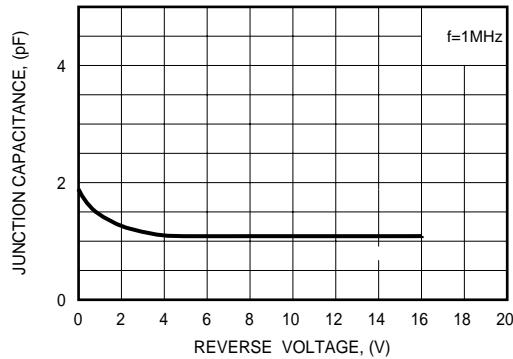


FIG. 4 - REVERSE CHARACTERISTICS

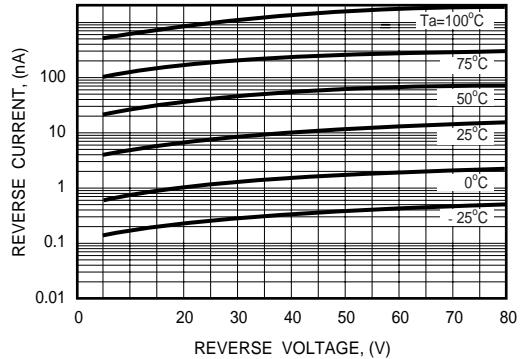


FIG. 5 - REVERSE RECOVERY TIME

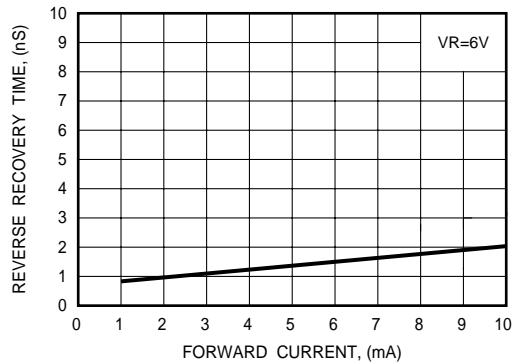


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

