# RH1200A - RH2000A

## SURFACE MOUNT HIGH VLTAGE RECTIFEER DIODES

**VOLTAGE RANGE: 1200 - 2000V**
**CURRENT: 0.5 A**

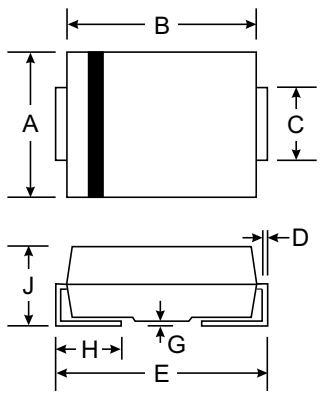
## Features

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with alcohol,Isopropanol and similar solvents

## Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)

RoHS COMPLIANT




| SMA(DO-214AC) | | |
|---|---|---|
| **Dim** | **Min** | **Max** |
| **A** | 2.29 | 2.92 |
| **B** | 4.00 | 4.60 |
| **C** | 1.27 | 1.63 |
| **D** | 0.15 | 0.31 |
| **E** | 4.80 | 5.59 |
| **G** | 0.10 | 0.20 |
| **H** | 0.76 | 1.52 |
| **J** | 2.01 | 2.62 |
| **All Dimensions in mm** | | |

## Maximum Ratings and Electrical Characteristics

$T_A$ = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic | Symbol | RH1200A | RH1500A | RH1800A | RH2000A | Unit |
|---|---|---|---|---|---|---|
| Maximum recurrent peak reverse voltage | $V_{RRM}$ | 1200 | 1500 | 1800 | 2000 | V |
| Maximum RMS voltage | $V_{RMS}$ | 840 | 1050 | 1260 | 1400 | V |
| Maximum DC blocking voltage | $V_{DC}$ | 1200 | 1500 | 1800 | 2000 | V |
| Maximum average forw ard rectified current 9.5mm lead length, @$T_A$=75℃ | $I_{F(AV)}$ | 0.5 | | | | A |
| Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @$T_J$=125℃ | $I_{FSM}$ | 30.0 | | | | A |
| Maximum instantaneous forw ard voltage @ 0.5A | $V_F$ | 2.5 | | | | V |
| Maximum reverse current @$T_A$=25℃ | $I_R$ | 5.0 | | | | μA |
| at rated DC blocking voltage @$T_A$=100℃ | | 100.0 | | | | |
| Maximum reverse capacitance (Note1) | $t_{rr}$ | 500 | | | | ns |
| Typical thermal resistance (Note2) | $R_{\theta JA}$ | 35 | | | | ℃/W |
| Typical junction capacitance (Note3) | $C_J$ | 15 | | | | pF |
| Operating junction temperature range | $T_J$ | - 55 ---- + 150 | | | | ℃ |
| Storage temperature range | $T_{STG}$ | - 55 ---- + 150 | | | | ℃ |

NOTE: 1. Measrued with $I_F$=0.5A, $I_R$=1A, $I_{rr}$=0.25A.
2. Thermal resistance from junction to ambient.
3. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

RATINGS AND CHARACTERISTIC CURVES RH1200A -RH2000A

**FIG.1 – FORWARD DERATING CURVE**

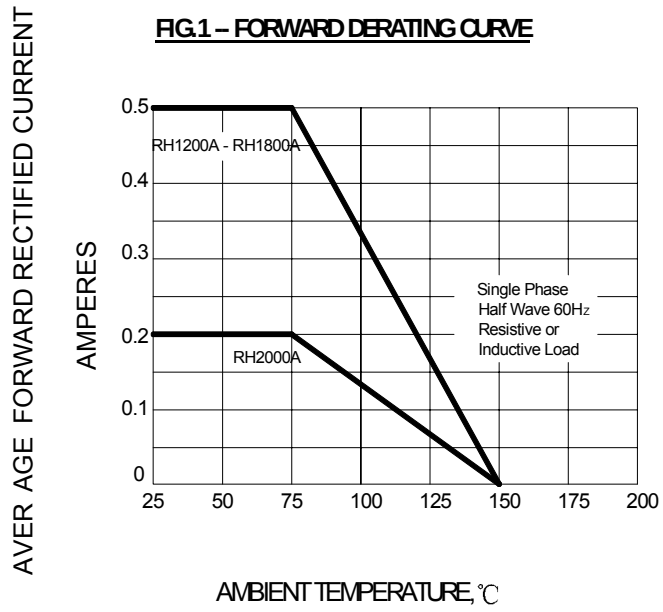



**FIG.2 – TYPICAL FORWARD CHARACTERISTICS**

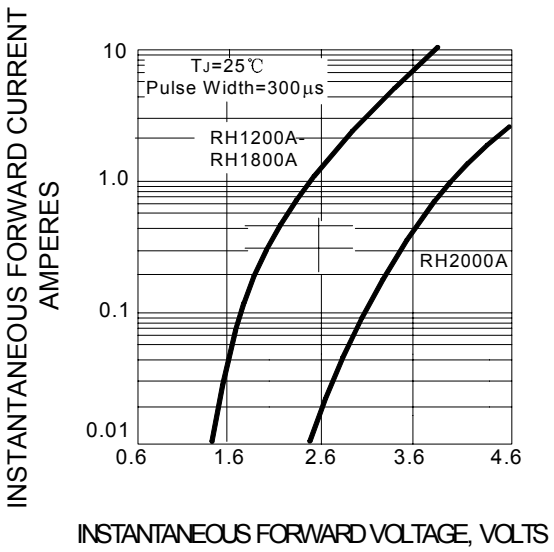



**FIG.3 – PEAK FORWARD SURGE CURREENT**

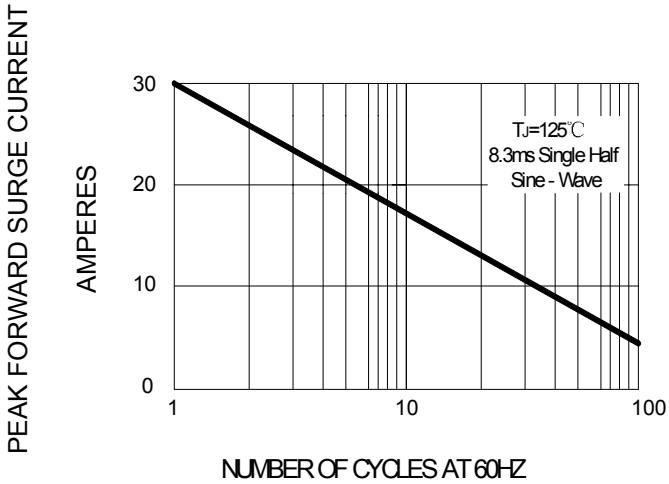



**FIG.4 – TYPICAL JUNCTION CAPACITANCE**