

HRF302A

Silicon Schottky Barrier Diode for Rectifying

HITACHI

ADE-208-244C(Z)
Rev 3

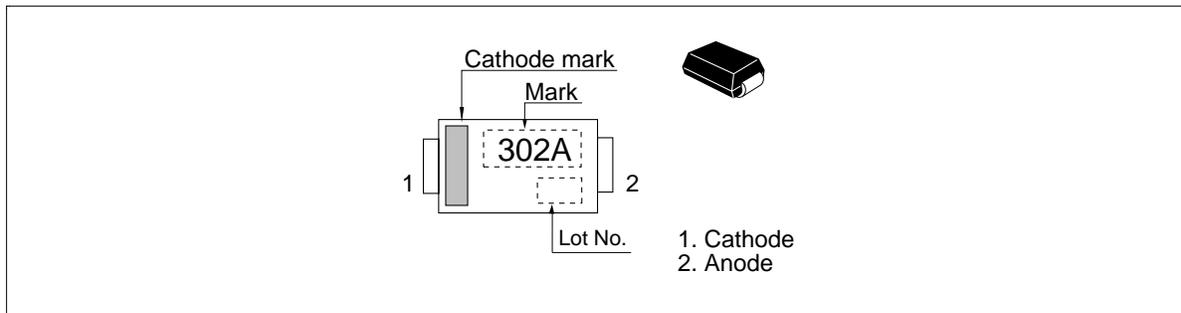
Features

- Low forward voltage drop and suitable for high efficiency rectifying.
- DO-214 is suitable for high density surface mounting and high speed assembly.

Ordering Information

| Type No. | Laser Mark | Package Code |
|----------|------------|--------------|
| HRF302A | 302A | DO-214 |

Outline



HRF302A

Absolute Maximum Ratings (Ta = 25°C)

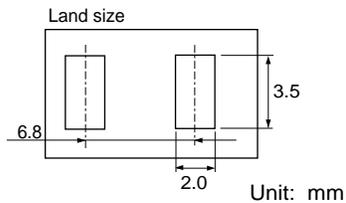
| Item | Symbol | Value | Unit |
|---|----------------|-------------|------|
| Repetitive peak reverse voltage | V_{RRM}^{*1} | 20 | V |
| Average rectified current | I_o^{*1} | 3 | A |
| Non-Repetitive peak forward surge current | I_{FSM}^{*2} | 100 | A |
| Junction temperature | Tj | 125 | °C |
| Storage temperature | Tstg | -40 to +125 | °C |

Notes: 1. See from Fig.4 to Fig.7
2. 10msec half sine wave 1 pulse

Electrical Characteristics (Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|--------------------|---------------|-----|-----|------|------|--|
| Forward voltage | V_F | — | — | 0.40 | V | $I_F = 3A$ |
| Reverse current | I_R | — | — | 1.0 | mA | $V_R = 20V$ |
| ESD-Capability | — | 250 | — | — | V | C = 200pF , R = 0Ω , Both forward and reverse direction 1 pulse. |
| Thermal resistance | $R_{th(j-a)}$ | — | 100 | — | °C/W | Glass epoxy board ^{*1} |
| | $R_{th(j-c)}$ | — | 34 | — | | Tc = 25°C |

Note: 1. Glass epoxy board



Main Characteristic

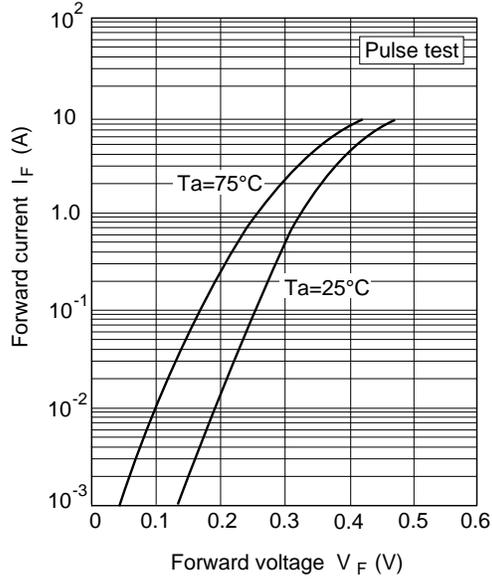


Fig.1 Forward current Vs. Forward voltage

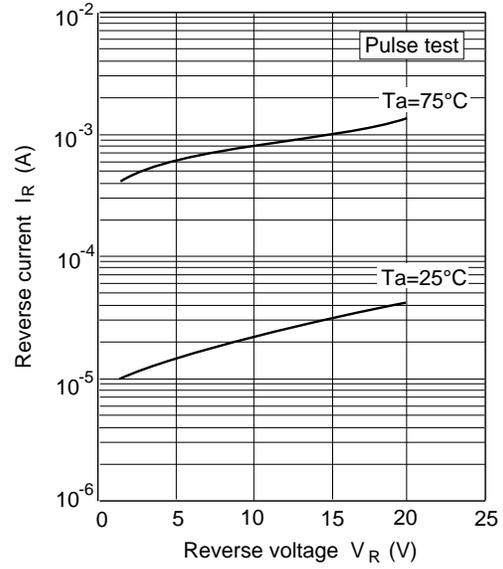


Fig.2 Reverse current Vs. Reverse voltage

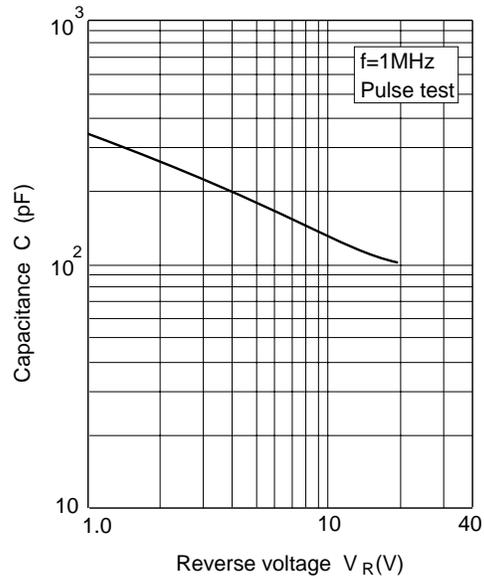


Fig.3 Capacitance Vs. Reverse voltage

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Main Characteristic

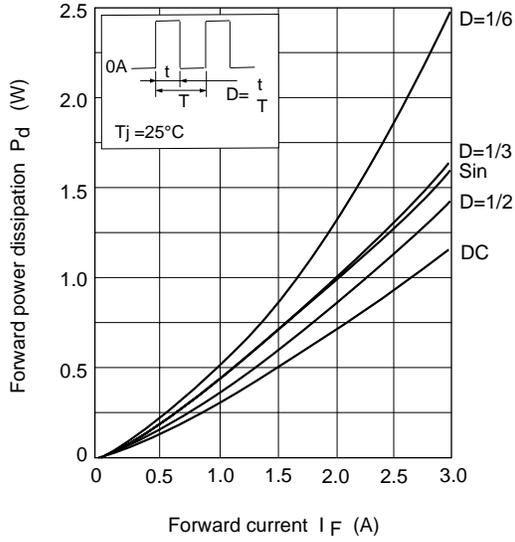


Fig.4 Forward power dissipation Vs. Forward current

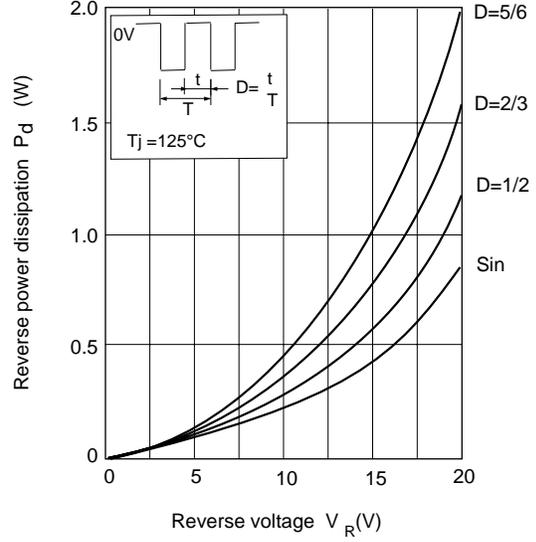


Fig.5 Reverse power dissipation Vs. Reverse voltage

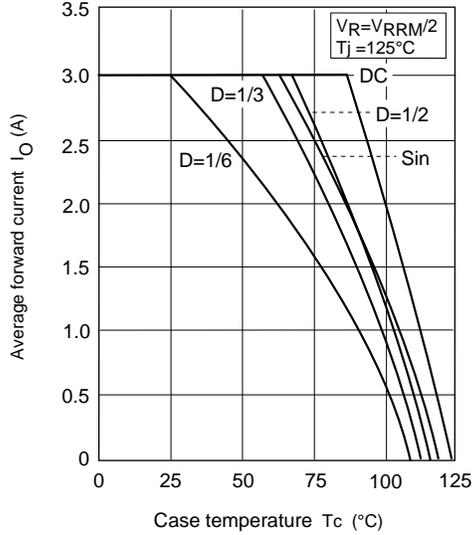


Fig.6 Average forward current Vs. Case temperature

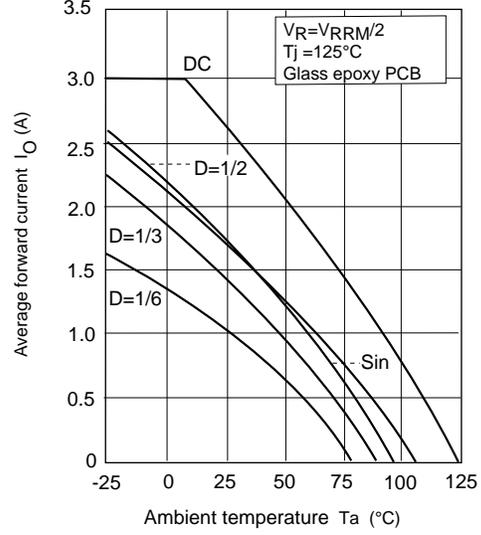


Fig.7 Average forward current Vs. Ambient temperature

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Package Dimensions

Unit : mm

