

Rectifier Diodes, Standard

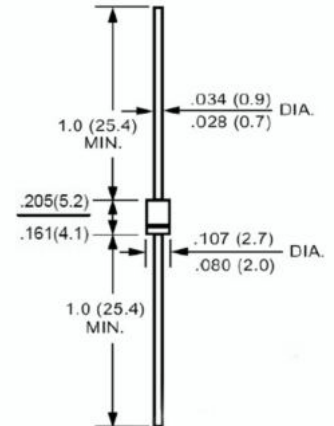


FEATURES:

- General purpose plastic silicon rectifier
- Low forward voltage drop
- High current capability
- High surge current capability

SPECIFICATION:

| | |
|-------------------|---------------------------------|
| Case | Molded plastic, DO-41 |
| Epoxy | UL 94V-0 rate flame retardant |
| Lead | Axial leads |
| Polarity | Colour band denotes cathode end |
| Mounting position | Any |



Art. Nr.
RND 1N4003

Absolute Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Parameter | Symbols | RND 1N4001 | RND 1N4002 | RND 1N4003 | RND 1N4004 | RND 1N4005 | RND 1N4006 | RND 1N4007 | Units |
|--|-----------------|---------------|------------|------------|------------|------------|------------|------------|--------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Length at $T_A = 75^\circ\text{C}$ | $I_{(AV)}$ | 1 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half-sine-wave Superimposed on rated load | I_{FSM} | 30 | | | | | | | A |
| Maximum Forward Voltage at 1 A DC and 25°C | V_F | 1.1 | | | | | | | V |
| Maximum Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$ | I_R | 5 50 | | | | | | | μA |
| Typical Thermal Resistance, Junction to Ambient | $R_{\theta JA}$ | 55 | | | | | | | $^\circ\text{C/W}$ |
| Typical Thermal Resistance, Junction to Lead | $R_{\theta JL}$ | 25 | | | | | | | $^\circ\text{C/W}$ |
| Operating Junction Temperature Range | T_J | - 55 to + 125 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 55 to + 150 | | | | | | | $^\circ\text{C}$ |

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Standart Rectifier Diodes, Axial Lead

