DIGITRON™ Semiconductors

High-reliability discrete products
and engineering services since 1977

# 1N3062-1N3064

## SWITCHING RECTFIERS

**FEATURES**

- Available as “HR” (high reliability) screened per MIL-PRF-19500, JANTX level. Add “HR” suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding “-PBF” suffix.

**MAXIMUM RATINGS**

| Characteristics | Symbol | 1N3062 | 1N3063 | 1N3064 | Unit |
|---|---|---|---|---|---|
| **Working peak reverse voltage** | $V_{RWM}$ | 50 | | | V |
| **Repetitive peak reverse voltage** | $V_{RRM}$ | 75 | | | V |
| **Average forward current** | $I_O$ | 75 | | | mA |
| **Forward steady-state current** | $I_F$ | 115 | | | mA |
| **Peak forward current (recurrent)** | $I_{FM}$ | 225 | | | mA |
| **Peak forward surge current (1.0µs)** | $I_{FSM}$ | 2000 | | | mA |
| **Power dissipation** | $P_D$ | 250 | | | mW |
| **Operating and storage junction temperature range** | $T_J$, $T_{stg}$ | -65 to +200 | | | °C |

**ELECTRICAL CHARACTERISTICS** ($T_A$ = 25°C unless otherwise specified)

| Characteristics | Symbol | Test Conditions | Min | Max | Unit |
|---|---|---|---|---|---|
| **Reverse current** | $I_R$ | $V_R$ = 50V | - | 0.1 | µA |
| **Reverse current** | $I_R$ | $V_R$ = 50V, $T_A$ = 150°C | - | 100 | µA |
| **Breakdown voltage** | $V_{BR}$ | $I_R$ = 5.0µA | 75 | - | V |
| **Forward voltage** | $V_F$ | $I_F$ = 250µA<br>$I_F$ = 1.0mA<br>$I_F$ = 2.0mA<br>$I_F$ = 10mA (1N3064)<br>$I_F$ = 10mA (1N3063)<br>$I_F$ = 20mA (1N3062) | 0.505<br>0.55<br>0.61<br>-<br>0.7<br>- | 0.575<br>0.65<br>0.71<br>1.0<br>0.85<br>1.0 | V |
| **Capacitance** | $C_T$ | $V_R$ = 0V, f = 1.0MHz (1N3062)<br>$V_R$ = 0V, f = 1.0MHz (1N3063, 1N3064) | -<br>- | 1.0<br>2.0 | pF |
| **Reverse recovery time** | $t_{rr}$ | $V_R$ = 6.0V, $I_F$ = 10mA, $R_L$ = 100Ω (1N3062)<br>$V_R$ = 1.0V, $I_F$ = 10mA, $R_L$ = 100Ω (1N3063, 1N3064) | -<br>- | 2.0<br>4.0 | ns |

DIGITRON™ Semiconductors

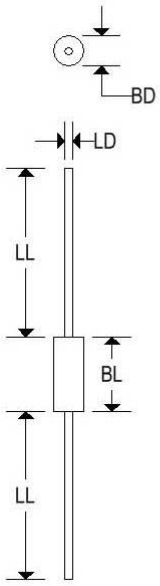
High-reliability discrete products
and engineering services since 1977

# 1N3062-1N3064

## SWITCHING RECTFIERS

**MECHANICAL CHARACTERISTICS**

| | |
|---|---|
| **Case** | DO-35 |
| **Marking** | Body painted, alpha numeric |
| **Normal polarity** | Cathode band |




| | DO-35 | | | |
|---|---|---|---|---|
| | Inches | | Millimeters | |
| | Min | Max | Min | Max |
| BD | 0.055 | 0.090 | 1.400 | 2.290 |
| BL | 0.120 | 0.200 | 3.050 | 5.080 |
| LD | 0.018 | 0.022 | 0.460 | 0.560 |
| LL | 1.000 | 1.500 | 25.400 | 38.100 |