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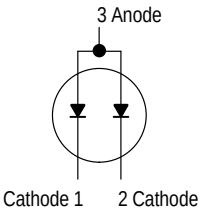
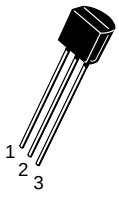
# Dual Diode
# Common Anode

**MSD6150**




**CASE 29–04, STYLE 4**
**TO–92 (TO–226AA)**

**MAXIMUM RATINGS (EACH DIODE)**

| Rating | Symbol | Value | Unit |
|---|---|---|---|
| Reverse Voltage | $V_R$ | 70 | Vdc |
| Peak Forward Recurrent Current | $I_F$ | 200 | mAdc |
| Peak Forward Surge Current (Pulse Width = 10 μsec) | $I_{FM(surge)}$ | 500 | mAdc |
| Total Device Dissipation @ $T_A$ = 25°C Derate above 25°C | $P_D$(1) | 625 5.0 | mW mW/°C |
| Operating and Storage Junction Temperature Range | $T_J$, $T_{stg}$(1) | –55 to +135 | °C |

**ELECTRICAL CHARACTERISTICS** ($T_A$ = 25°C unless otherwise noted) **(EACH DIODE)**

| Characteristic | Symbol | Min | Typ | Max | Unit |
|---|---|---|---|---|---|
| Breakdown Voltage ($I_{(BR)}$ = 100 μAdc) | $V_{(BR)}$ | 70 | — | — | Vdc |
| Reverse Current ($V_R$ = 50 Vdc) | $I_R$ | — | — | 0.1 | μAdc |
| Forward Voltage ($I_F$ = 10 mAdc) | $V_F$ | — | 0.80 | 1.0 | Vdc |
| Capacitance ($V_R$ = 0) | C | — | 5.0 | 8.0 | pF |
| Reverse Recovery Time ($I_F$ = $I_R$ = 10 mAdc, $V_R$ = 5.0 Vdc, $i_{rr}$ = 1.0 mAdc) | $t_{rr}$ | — | — | 100 | ns |

1. Continuous package improvements have enhanced these guaranteed Maximum Ratings as follows: $P_D$ = 1.0 W @ $T_C$ = 25°C, Derate above 8.0 mW/°C, $P_D$ = 10 W @ $T_C$ = 25°C, Derate above 80 mW/°C, $T_J$, $T_{stg}$ = –55 to +150°C, θJC = 12.5°C/W, θJA = 125°C.

## TYPICAL CHARACTERISTICS

### Curves Applicable to Each Cathode

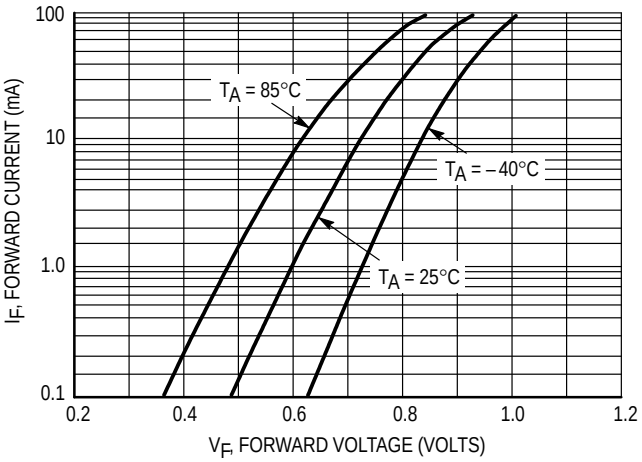



**Figure 1. Forward Voltage**

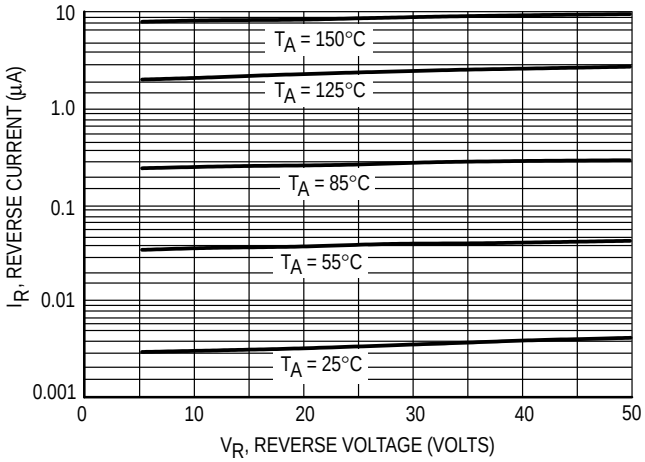



**Figure 2. Leakage Current**

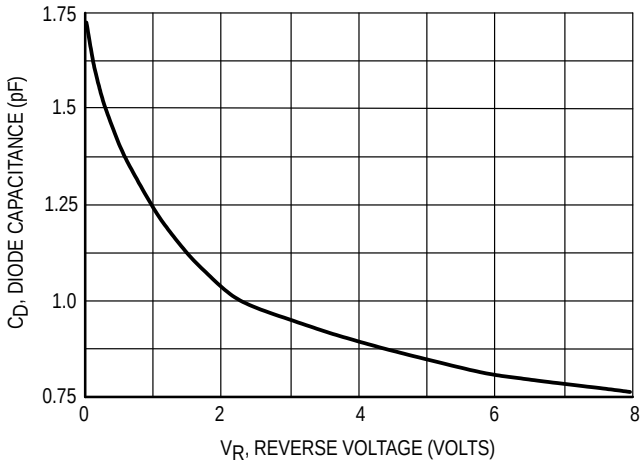
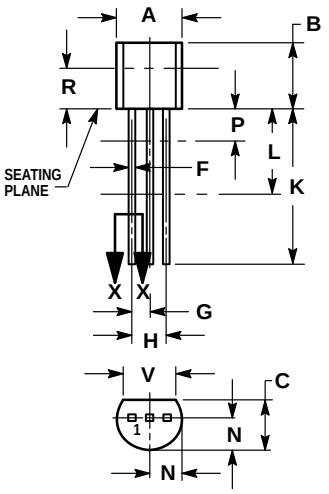
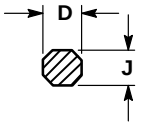



**Figure 3. Capacitance**

## PACKAGE DIMENSIONS




SECTION X–X

NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.
3. CONTOUR OF PACKAGE BEYOND DIMENSION R IS UNCONTROLLED.
4. DIMENSION F APPLIES BETWEEN P AND L. DIMENSION D AND J APPLY BETWEEN L AND K MINIMUM. LEAD DIMENSION IS UNCONTROLLED IN P AND BEYOND DIMENSION K MINIMUM.

| | INCHES | | MILLIMETERS | |
|---|---|---|---|---|
| DIM | MIN | MAX | MIN | MAX |
| A | 0.175 | 0.205 | 4.45 | 5.20 |
| B | 0.170 | 0.210 | 4.32 | 5.33 |
| C | 0.125 | 0.165 | 3.18 | 4.19 |
| D | 0.016 | 0.022 | 0.41 | 0.55 |
| F | 0.016 | 0.019 | 0.41 | 0.48 |
| G | 0.045 | 0.055 | 1.15 | 1.39 |
| H | 0.095 | 0.105 | 2.42 | 2.66 |
| J | 0.015 | 0.020 | 0.39 | 0.50 |
| K | 0.500 | — | 12.70 | — |
| L | 0.250 | — | 6.35 | — |
| N | 0.080 | 0.105 | 2.04 | 2.66 |
| P | — | 0.100 | — | 2.54 |
| R | 0.115 | — | 2.93 | — |
| V | 0.135 | — | 3.43 | — |

**CASE 029–04**
**(TO–226AA)**
**ISSUE AD**

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