

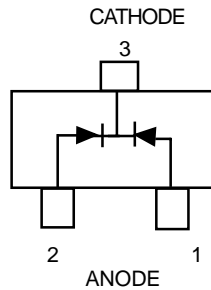
Common Anode Silicon Dual Switching diodes

These Common Cathode Silicon Epitaxial Planar Dual Diodes are designed for use in ultra high speed switching applications. These devices are housed in the SC-59 package which is designed for low power surface mount applications.

- Fast t_{rr} , < 3.0 ns
- Low C_D , < 2.0 pF
- Available in 8 mm Tape and Reel

Use M1MA151/2WKT1 to order the 7 inch/3000 unit reel.

Use M1MA151/2WKT3 to order the 13 inch/10,000 unit reel.



M1MA151WKT1
M1MA152WKT1

SC-59 PACKAGE
COMMON CATHODE
DUAL SWITCHING DIODES
40/80 V-100mA
SURFACE MOUNT

3
2
1
CASE 318D-03, STYLE3
SC-59

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

| Rating | Symbol | Value | Unit |
|----------------------------|-------------|-----------------|------|
| Reverse Voltage | M1MA151WAT1 | V_R | 40 |
| | M1MA152WAT1 | | 80 |
| Peak Reverse Voltage | M1MA151WAT1 | V_{RM} | 40 |
| | M1MA152WAT1 | | 80 |
| Forward Current | Single | I_F | 100 |
| | Dual | | 150 |
| Peak Forward Current | Single | I_{FM} | 225 |
| | Dual | | 340 |
| Peak Forward Surge Current | Single | $I_{FSM}^{(1)}$ | 500 |
| | Dual | | 750 |

THERMAL CHARACTERISTICS

| Rating | Symbo | IMax | Unit |
|----------------------|-----------|-------------|------------------|
| Power Dissipation | P_D | 200 | mW |
| Junction Temperature | T_J | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

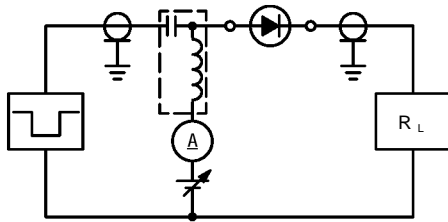
| Characteristic | Symbol | Condition | Min | Max | Unit |
|---------------------------------|----------------|---|--------------------------|-----|------|
| Reverse Voltage Leakage Current | M1MA151WAT1 | I_R | $V_R = 35\text{ V}$ | — | 0.1 |
| | M1MA152WAT1 | | $V_R = 75\text{ V}$ | — | 0.1 |
| Forward Voltage | V_F | $I_F = 100\text{ mA}$ | — | 1.2 | Vdc |
| Reverse Breakdown Voltage | M1MA151WAT1 | V_R | $I_R = 100\ \mu\text{A}$ | 40 | — |
| | M1MA152WAT1 | | | 80 | — |
| Diode Capacitance | C_D | $V_R = 0, f = 1.0\text{ MHz}$ | — | 2.0 | pF |
| Reverse Recovery Time | $t_{rr}^{(2)}$ | $I_F = 10\text{ mA}, V_R = 6.0\text{ V}, R_L = 100\ \Omega, I_{rr} = 0.1 I_R$ | — | 3.0 | ns |

1. $t = 1\text{ SEC}$

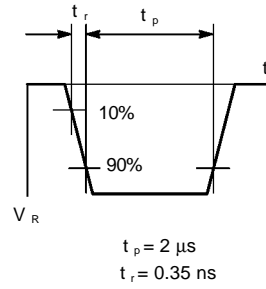
2. t_{rr} Test Circuit

M1MA151WKT1 M1MA152WKT1

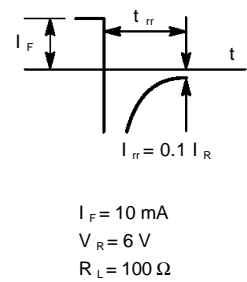
RECOVERY TIME EQUIVALENT TEST CIRCUIT



INPUT PULSE

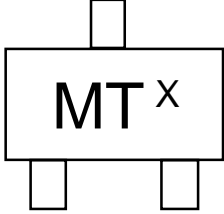


OUTPUT PULSE



DEVICE MARKING—EXAMPLE

| Marking Symbol | | |
|----------------|-------|-------|
| Type No. | 151WK | 152WK |
| Symbol | MT | MU |



The "X" represents a smaller alpha digit Date Code. The Date Code indicates the actual month in which the part was manufactured.