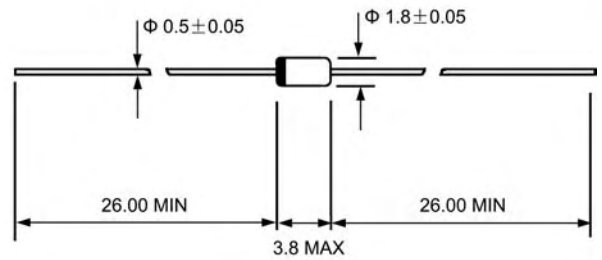


VOLTAGE RANGE: 30 V
CURRENT: 0.03 A

Features

- ◇ Low forward voltage drop
 - ◇ Satisfactory wave detection efficiency
 - ◇ Extremely low reverse current I_R
 - ◇ Small temperature coefficient of forward characteristics
 - ◇ Extremely low reverse current
- These products are ideal for use in ordinary wave detection and super high speed switching circuits

DO - 35(GLASS)



Dimensions in millimeters

Mechanical Data

- ◇ Case: JEDEC DO--35, glass case
- ◇ Polarity: Color band denotes cathode end
- ◇ Product Sign: Marking MA700A on body
- ◇ Weight: Approx. 0.13 gram

ABSOLUTE RATINGS (LIMITING VALUES) (T_A=25°C)

| Parameters | Symbols | Value | UNITS |
|---------------------------|-----------|-----------------|-------|
| Reverse voltage | V_R | 30.0 | V |
| Peak reverse voltage | V_{RM} | 30.0 | V |
| Average rectified current | I_O | 30.0 | mA |
| Peak forward current | I_{FM} | 150.0 | mA |
| Junction temperature | T_J | 125 | °C |
| Storage temperature | T_{STG} | - 55 ---- + 150 | °C |

ELECTRICAL CHARACTERISTICS (T_A=25°C)

| Parameters | Symbols | Test Conditions | Min. | Typ. | Max. | UNITS |
|-----------------------|----------|---|------|------|------|-------|
| Forward voltage(DC) | V_F | $I_F=1mA$ | | | 0.4 | V |
| | | $I_F=30mA$ | | | 1.0 | |
| Reverse current | I_R | $V_R=30V$ | | | 150 | nA |
| Junction capacitance | C_J | $V_R=1V$ $f=1MHz$ | | 1.3 | | pF |
| Rectifier efficiency | η | $V_i=3V$ $f=30MHz$ $C_L=10pF$ $R_L=3.9K\Omega$ | | 60.0 | | % |
| Reverse recovery time | t_{rr} | $I_F=I_R=10mA$ $t_{rr}=1mA$ $R_c=100k\Omega$ | | 1 | | ns |

NOTE: 1. Schottky barrier rectifier diode is sensitive to electric shock(static electricity .etc.). Due attention must be paid on charge of a human body and leakage from the equipment used.

Ratings AND Characteristic Curves

FIG.1 – FORWARD VOLTAGE VS. FORWARD CURRENT

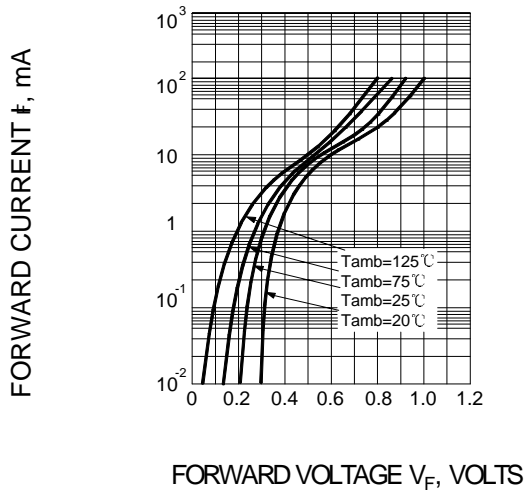


FIG.2 – FORWARD VOLTAGE VS. AMBIENT TEMPERATURE

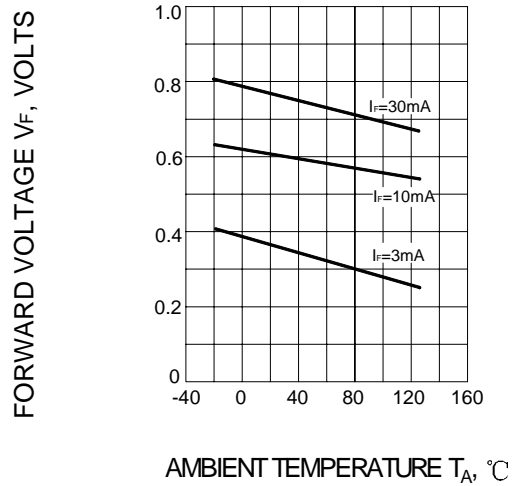


FIG.3 – MA700A REVERSE CHARACTERISTICS

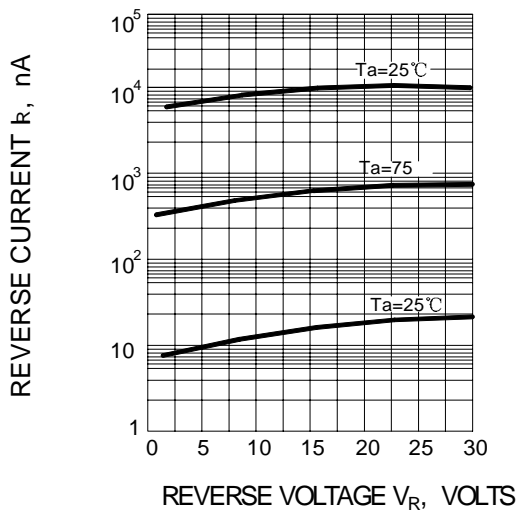
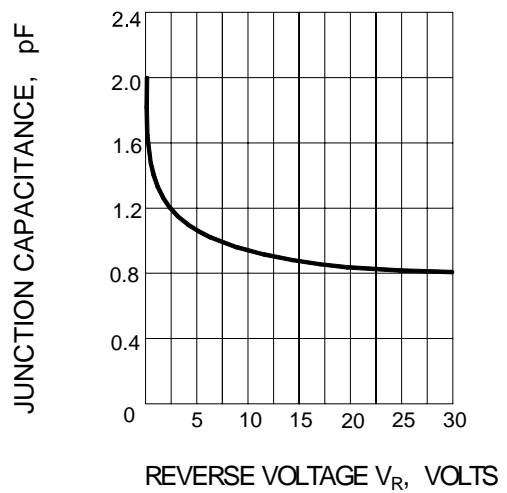


FIG.4 – MA700A JUNCTION CAPACITANCE



Ratings AND Characteristic Curves

FIG.5 – MA700A REVERSE CURRENT TEMPERATURE CHARACTERISTICS

