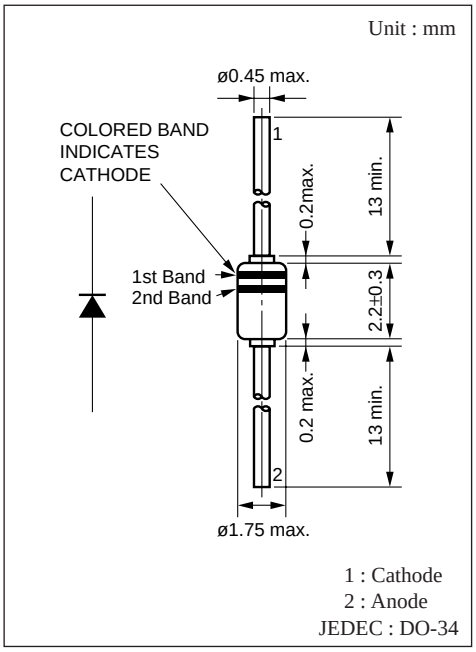
# MA776

## Silicon epitaxial planer type

For the switching circuit




### ■ Features

- Sealed in small glass package (DO-34)
- 5mm pitch insertion possible
- Low forward rise voltage $V_F$ and satisfactory wave detection efficiency
- Temperature coefficient of forward characteristic is small.
- Extremely low reverse current $I_R$
- $V_R$ (DC value)= 40V guaranteed

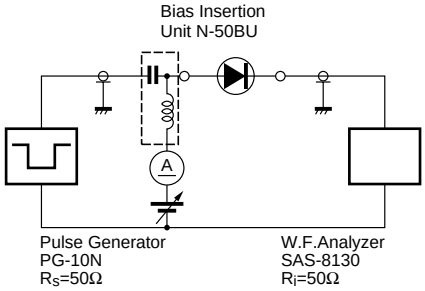
### ■ Absolute Maximum Ratings (Ta= 25˚C)

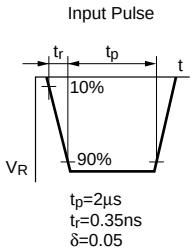
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Reverse voltage (DC) | $V_R$ | 40 | V |
| Repetitive peak reverse voltage | $V_{RRM}$ | 40 | V |
| Peak forward current | $I_{FM}$ | 150 | mA |
| Average forward current | $I_F$ | 30 | mA |
| Junction temperature | $T_j$ | 125 | ˚C |
| Storage temperature | $T_{stg}$ | – 55 to +125 | ˚C |

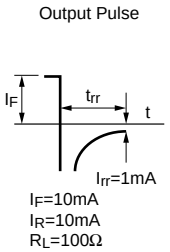
### ■ Electrical Characteristics (Ta= 25˚C)

| Parameter | Symbol | Condition | min | typ | max | Unit |
|---|---|---|---|---|---|---|
| Reverse current (DC) | $I_R$ | $V_R$= 40V | | | 200 | nA |
| Forward voltage (DC) | $V_{F1}$ | $I_F$=1mA | | | 0.4 | V |
| | $V_{F2}$ | $I_F$= 30mA | | | 1 | V |
| Terminal capacitance | $C_t$ | $V_R$ = 1V, f=1MHz | | 1.3 | | pF |
| Reverse recovery time | $t_{rr}$* | $I_F$ = $I_R$=100mA<br>$I_{rr}$= 1mA , $R_L$=100Ω | | 2 | | ns |
| Detection efficiency | η | $V_{in}$= 3$V_{(peak)}$, f= 30MHz<br>$R_L$= 3.9kΩ, $C_L$=10pF | | 60 | | % |

Note 1. Schottky barrier 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.
2. Rated input/output frequency : 2000MHz
3. * $t_{rr}$ measuring circuit



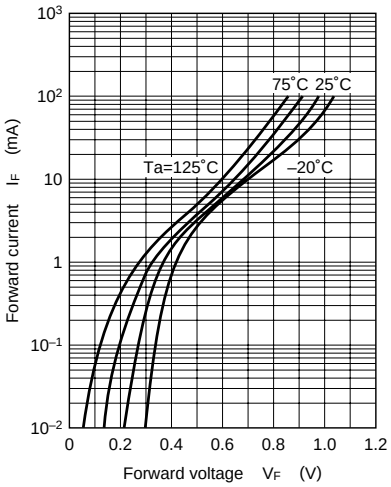



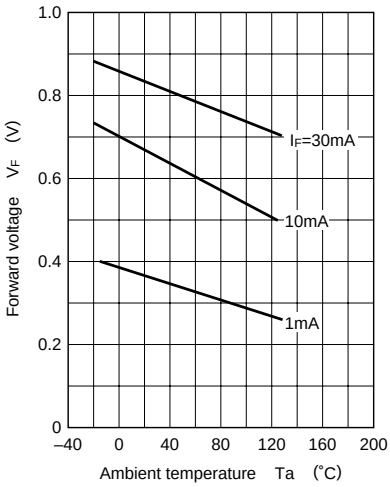

### ■ Cathode Indication

| Type No. | | MA776 |
|---|---|---|
| Color | 1st Band | Silver |
| | 2nd Band | Yellow |

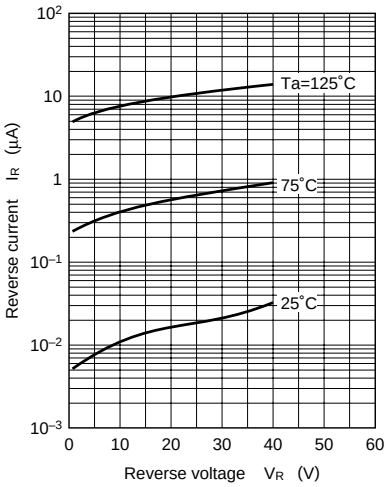
$I_F - V_F$



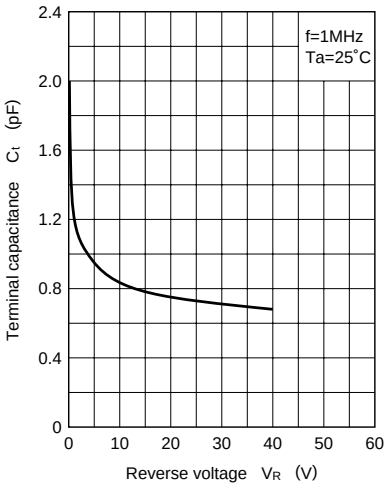

$V_F - Ta$




$I_R - V_R$




$C_t - V_R$




$I_R - Ta$