

# MA700A-34

## SCHOTTKY BARRIERS SWITCHING DIODES

|         |         |         |             |
|---------|---------|---------|-------------|
| VOLTAGE | 30 Volt | CURRENT | 0.03 Ampere |
|---------|---------|---------|-------------|

|       |                 |
|-------|-----------------|
| DO-34 | Unit : inch(mm) |
|-------|-----------------|

### FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance
- Lead free in compliance with EU RoHS 2011/65/EU directive

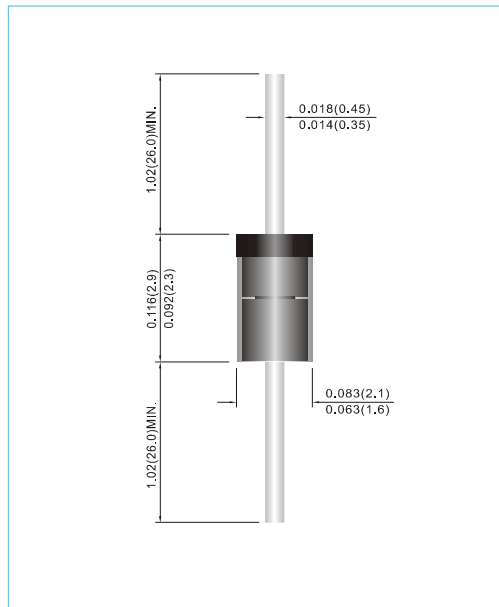
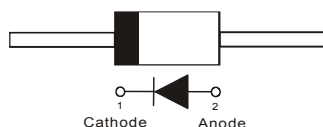
### MECHANICAL DATA

- Case: Molded Glass DO-34
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Ordering informatio

B/P - 2K per Bulk box

T/R - 10K per 15" plastic Reel

T/B - 5K per horiz. tape & Ammo box



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>J</sub> = 25°C unless otherwise noted)

| PARAMETER                                                                                                   | SYMBOL             | MA700A-34    | UNITS |
|-------------------------------------------------------------------------------------------------------------|--------------------|--------------|-------|
| Peak Repetitive Reverse Voltage                                                                             | V <sub>RRM</sub>   | 30           | V     |
| Peak reverse voltage                                                                                        | V <sub>R</sub>     | 30           | V     |
| Forward Continuous Currentt                                                                                 | I <sub>F(AV)</sub> | 30           | mA    |
| Peak Forward Surge Current                                                                                  | I <sub>FSM</sub>   | 150          | mA    |
| Maximum Forward Voltage, I <sub>F</sub> = 1mA<br>I <sub>F</sub> = 30mA                                      | V <sub>F</sub>     | 0.4<br>1.0   | V     |
| Maximum Reverse Current VR=30V                                                                              | I <sub>R</sub>     | 0.15         | μA    |
| Typical Junction Capacitance                                                                                | C <sub>J</sub>     | 1.3(TYP.)    | pF    |
| Typical Reverse Recovery I <sub>F</sub> =I <sub>R</sub> =10mA<br>t <sub>rr</sub> =1mA ,R <sub>L</sub> =100Ω | t <sub>rr</sub>    | 1.0(TYP.)    | ns    |
| Rectifier Efficiency<br>V <sub>I</sub> =3V f=30MHz C <sub>L</sub> =10pF R <sub>L</sub> =3.9KΩ               | η                  | 60(TYP)      | %     |
| Junction Temperature                                                                                        | T <sub>J</sub>     | -55 to + 125 | °C    |
| Storage Temperature                                                                                         | T <sub>STG</sub>   | -55 to + 150 | °C    |

### NOTE :

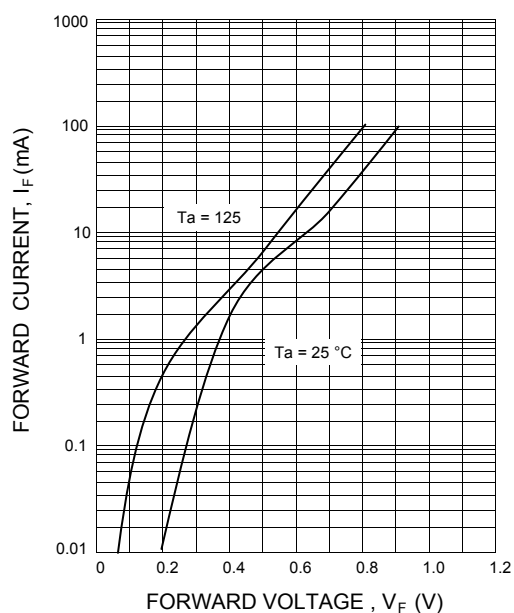
1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ

2. From I<sub>F</sub>=50mA to I<sub>R</sub>=200mA, R<sub>L</sub>=100Ω

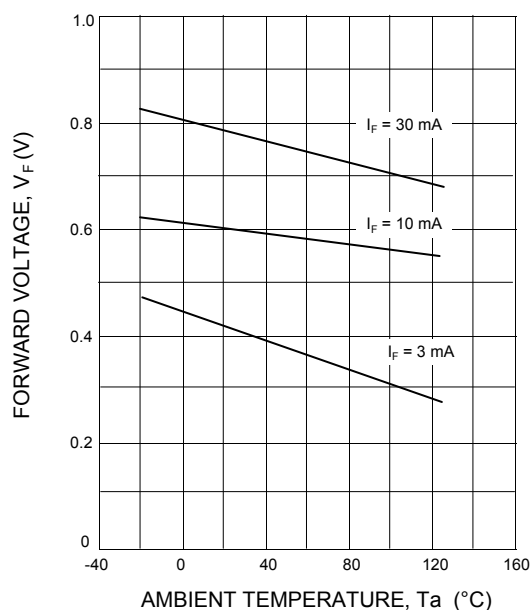
# MA700A-34

## RATING AND CHARACTERISTIC CURVES

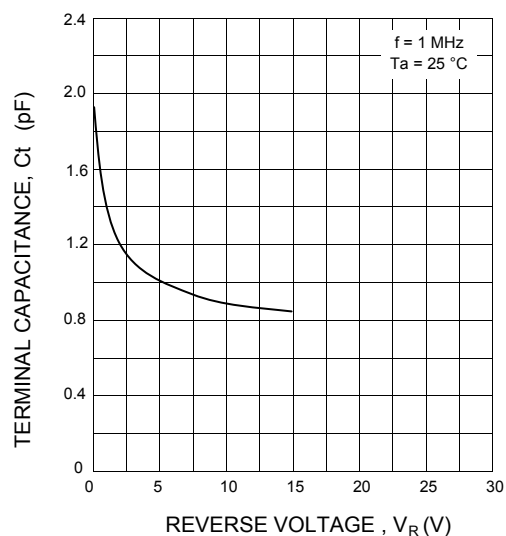
**FIG. 1 - FORWARD CURRENT VS. FORWARD VOLTAGE**



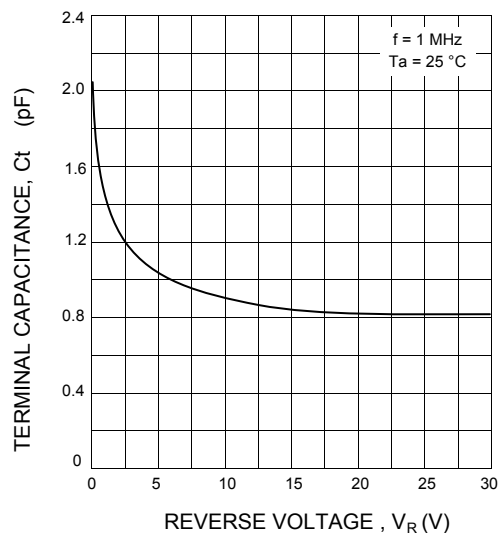
**FIG. 2 - FORWARD VOLTAGE VS. AMBIENT TEMPERATURE**



**FIG. 3 - TERMINALS CAPACITANCE VS. REVERSE VOLTAGE : MA700**



**FIG. 4 - TERMINALS CAPACITANCE VS. REVERSE VOLTAGE : MA700A**



## MA700A-34

### Part No\_packing code\_Version

MA700A-34\_AX\_10001

MA700A-34\_AY\_10001

MA700A-34\_R2\_10001

MA700A-34\_B0\_10001

For example :

**RB500V-40\_R2\_00001**

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

| Packing Code <b>XX</b>               |                      |                                  |                      | Version Code <b>XXXXX</b> |                      |                                       |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type                         | 1 <sup>st</sup> Code | Packing size code                | 2 <sup>nd</sup> Code | HF or RoHS                | 1 <sup>st</sup> Code | 2 <sup>nd</sup> ~5 <sup>th</sup> Code |
| Tape and Ammunition Box (T/B)        | <b>A</b>             | N/A                              | <b>0</b>             | HF                        | <b>0</b>             | serial number                         |
| Tape and Reel (T/R)                  | <b>R</b>             | 7"                               | <b>1</b>             | RoHS                      | <b>1</b>             | serial number                         |
| Bulk Packing (B/P)                   | <b>B</b>             | 13"                              | <b>2</b>             |                           |                      |                                       |
| Tube Packing (T/P)                   | <b>T</b>             | 26mm                             | <b>X</b>             |                           |                      |                                       |
| Tape and Reel (Right Oriented) (TRR) | <b>S</b>             | 52mm                             | <b>Y</b>             |                           |                      |                                       |
| Tape and Reel (Left Oriented) (TRL)  | <b>L</b>             | PANASERT T/B CATHODE UP (PBCU)   | <b>U</b>             |                           |                      |                                       |
| FORMING                              | <b>F</b>             | PANASERT T/B CATHODE DOWN (PBCD) | <b>D</b>             |                           |                      |                                       |

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