

MA2B027 Series

Silicon epitaxial planar type variable resistor

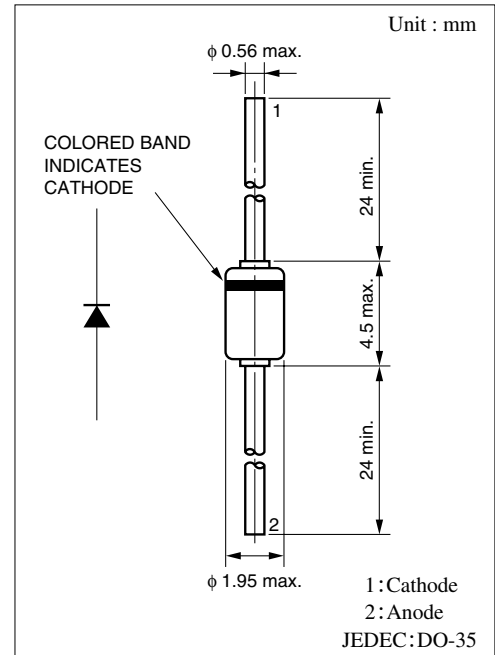
For temperature and reduced voltage compensation

■ Features

- High reliability achieved through combination of a planar type chip and glass sealing structure
- Easy mounting because of employing DO-35 (DHD) envelope
- Extremely small reverse current I_R
- Large power dissipation
- Wide forward voltage V_F range

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit | |
|----------------------|--------------|-------------|------------------|----|
| Reverse voltage (DC) | V_R | 6 | V | |
| Forward current (DC) | MA2B0270A/B | I_{FM} | 150 | mA |
| | MA2B027WA/WB | | | |
| | MA2B027TA/TB | | | |
| | MA2B027QA/QB | | | |
| Power dissipation | P_D | 150 | mW | |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ | |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ | |



■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit | |
|--|------------------------|-------------------------------|------|-----|------|----------------------------|--|
| Reverse current (DC) | I_R | $V_R = 6\text{ V}$ | | | 10 | μA | |
| | | $V_R = 6\text{ V}$ | | | 1 | | |
| | | | | | | | |
| | | | | | | | |
| Forward voltage (DC) | V_{F1} | $I_F = 1.5\text{ mA}$ | 0.56 | | 0.61 | V | |
| | | $I_F = 10\text{ }\mu\text{A}$ | 0.59 | | 0.64 | | |
| | | | 0.77 | | | | |
| | | | 1.15 | | | | |
| | | | 1.60 | | | | |
| Forward voltage (DC) | V_{F2} | $I_F = 50\text{ mA}$ | | | 1.1 | V | |
| | | $I_F = 3\text{ mA}$ | 1.18 | | 1.28 | | |
| | | | 1.26 | | 1.36 | | |
| | | | 1.76 | | 1.92 | | |
| | | | 1.88 | | 2.04 | | |
| | | | 2.20 | | 2.40 | | |
| | | | 2.34 | | 2.54 | | |
| Temperature coefficient of forward voltage | $-\Delta V_F/\Delta T$ | $I_F = 1.5\text{ mA}$ | | 2.0 | | $\text{mV}/^\circ\text{C}$ | |
| | | $I_F = 3\text{ mA}$ | | 4.6 | | | |
| | | | | 6.5 | | | |
| | | | | 8.8 | | | |

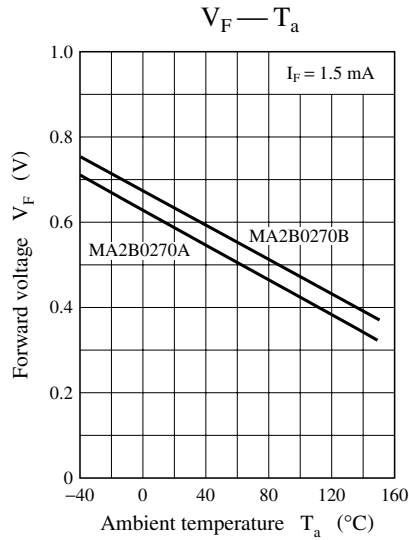
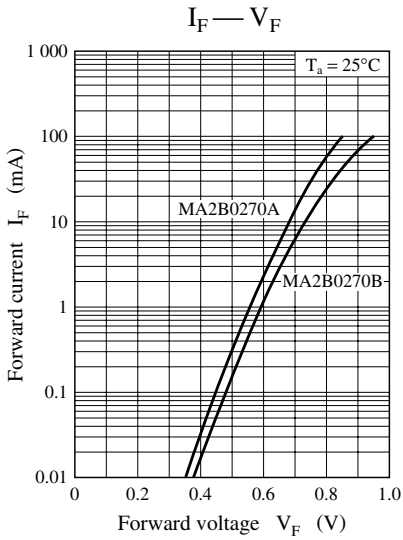
Note) Rated input/output frequency: 100 MHz

■ Cathode Indication

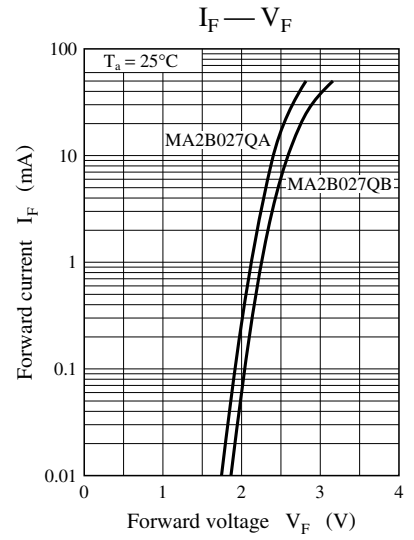
| Type No. | MA2B0270A | MA2B0270B | MA2B027WA | MA2B027WB | MA2B927TA* | MA2B027TB* | MA2B027QA* | MA2B027QB* |
|----------|-----------|-----------|------------|-----------|------------|------------|------------|------------|
| Color | Yellow | Blue | Light Blue | Brown | Yellow | Blue | Green | Brown |

Note) * : Body Color ; Black

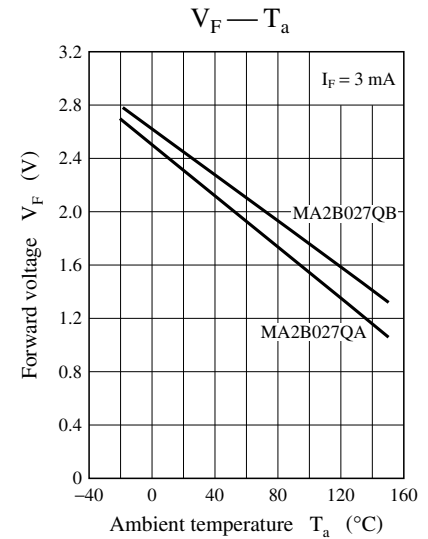
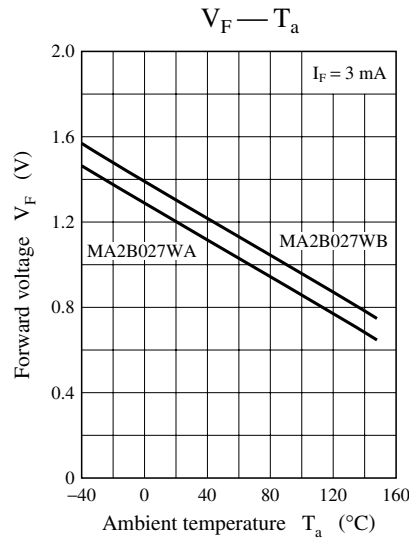
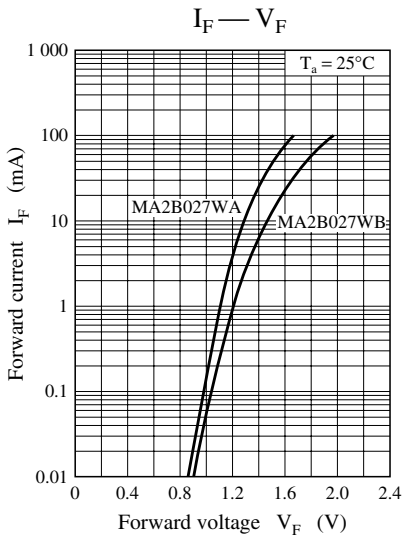
Characteristics charts of MA2B027



Characteristics charts of MA2B027Q



Characteristics charts of MA2B027W



Characteristics charts of MA2B027T

