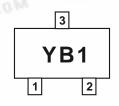


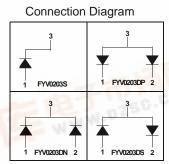
FYV0203S/DN/DP/DS



SOT-23



Marking
FYV0203S = YB1 FYV0203DP = YB3
FYV0203DN = YB2 FYV0203DS = YB4



Schottky Diode

Absolute Maximum Ratings TA=25°C unless otherwise noted

| Symbol | Parameter | Value | Units | |
|--------------------|--|-------------|-------|--|
| V _{RRM} | Maximum Repetitive Reverse Voltage | 30 | V | |
| I _{F(AV)} | Average Rectified Forward Current | 0.2 | Α | |
| I _{FSM} | Non-repetitive Peak Surge Current Pulse Width = 1.0s | 0.6 | A | |
| T _{STG} | Storage Temperature Range | -65 to +150 | °C | |
| TJ | Operating Junction Temperature | 150 | °C | |

Thermal Characteristics

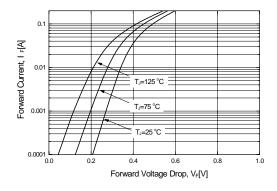
| Symbol | | Parameter | Value | Units | |
|--------|-----------------|---|-------|-------|--|
| | $R_{\theta JA}$ | Thermal Resistance, Junction to Ambient | 430 | °C/W | |

Electrical Characteristics TA=25°C unless otherwise noted

| Symbol | Parameter | | Min. | Тур. | Max. | Units |
|------------------|--|-------------------------|------|------|------|-------|
| V _F * | Forward Voltage Drop | | | | | mV |
| • | $I_F = 0.1 \text{mA}$ | | | 210 | 240 | |
| | $l_F = 1mA$ | | | 270 | 320 | |
| | $I_{F} = 10\text{mA}$ $I_{F} = 30\text{mA}$ $I_{F} = 100\text{mA}$ $I_{F} = 200\text{mA}$ | | | 340 | 400 | |
| | | | - | 390 | 500 | |
| | | | - | 485 | 800 | |
| | | | - | 600 | 1000 | |
| I _R * | Reverse Current | =1 | | | | uA |
| | @ Rated V _R | T _A = 25 °C | - | 0.2 | 2 | |
| | The Art of the Control of the Contro | T _A = 125 °C | - | 130 | - | |
| Ст | Total Capacitance | • | | | | pF |
| 7 | V _R = 1V , f = 1.0 MHz | | - | - | 10 | · |
| t _{rr} | Reverse Recovery Time | | | | | ns |
| | $I_{F} = I_{R} = 10 \text{mA}, I_{RR} = 1 \text{mA}, R_{L} = 100 \Omega$ | | - | - | 5 | |

^{*} Pulse Test: Pulse Width=300µs, Duty Cycle=2%

Typical Characteristics



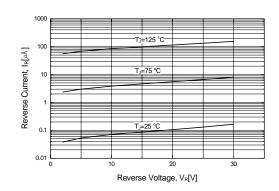


Figure 1. Typical Forward Voltage Characteristics



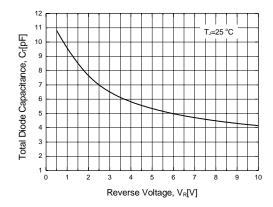
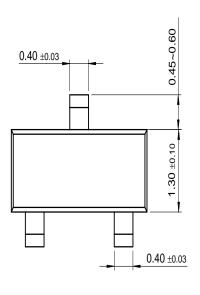


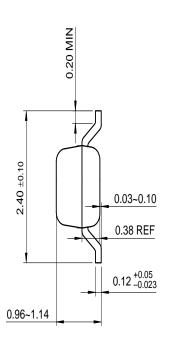
Figure 3. Total Diode Capacitance

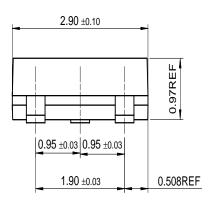
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Package Dimensions

SOT-23







Dimensions in Millimeters

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| $CROSSVOLT^{TM}$ | GlobalOptoisolator™ | POP™ | SuperSOT™-3 | |
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