

MA3X740 (MA740)

Silicon epitaxial planar type

For super high speed switching circuit

For small current rectification

■ Features

- Two MA3X721s are contained in one package (series connection)
- Allowing to rectify under ($I_{F(AV)} = 200$ mA) condition (single diode value)

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

| Parameter | Symbol | Rating | Unit | |
|---|-----------|-------------|------------------|----|
| Reverse voltage (DC) | V_R | 30 | V | |
| Repetitive peak reverse voltage | V_{RRM} | 30 | V | |
| Average forward current | Single | $I_{F(AV)}$ | 200 | mA |
| | Double*1 | | | |
| Peak forward current | Single | I_{FM} | 300 | mA |
| | Double*1 | | | |
| Non-repetitive peak forward surge current*2 | Single | I_{FSM} | 1 | A |
| | Double*1 | | | |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ | |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ | |

Note) *1: Value per chip

*2: The peak-to-peak value in one cycle of 50 Hz sine-wave (non-repetitive)

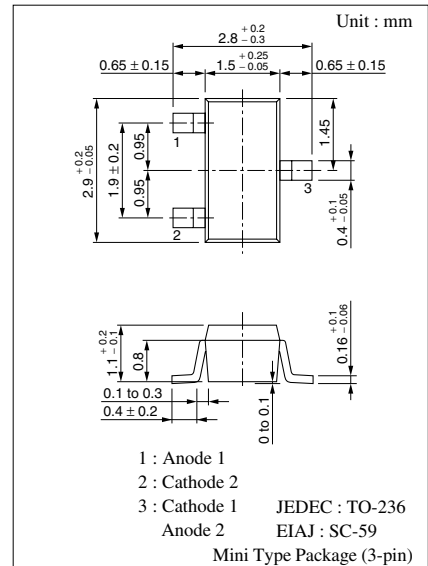
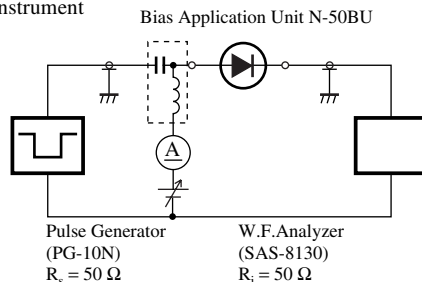
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|------------------------|----------|--|-----|-----|------|---------------|
| Reverse current (DC) | I_R | $V_R = 30$ V | | | 50 | μA |
| Forward voltage (DC) | V_F | $I_F = 200$ mA | | | 0.55 | V |
| Terminal capacitance | C_t | $V_R = 0$ V, $f = 1$ MHz | | 30 | | pF |
| Reverse recovery time* | t_{rr} | $I_F = I_R = 100$ mA $I_{tr} = 10$ mA, $R_L = 100$ Ω | | 3 | | ns |

Note) 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

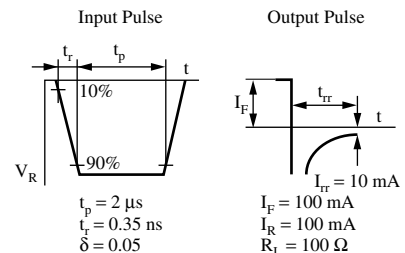
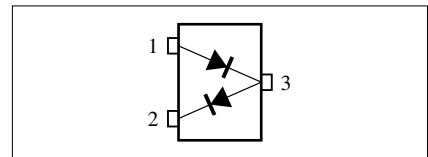
2. Rated input/output frequency: 1 000 MHz

3. *: t_{rr} measuring instrument

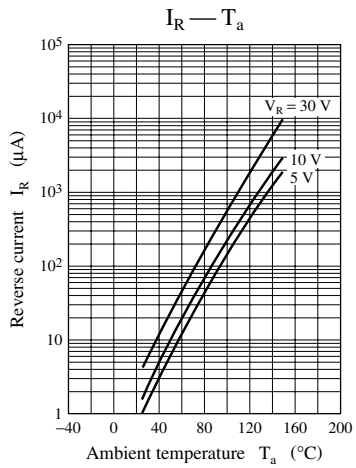
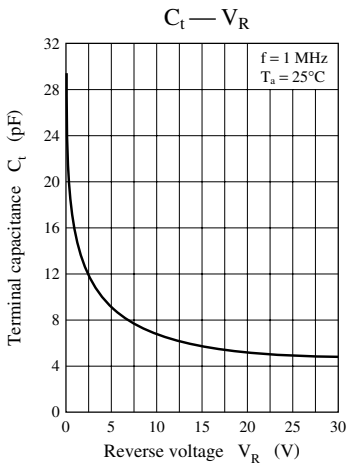
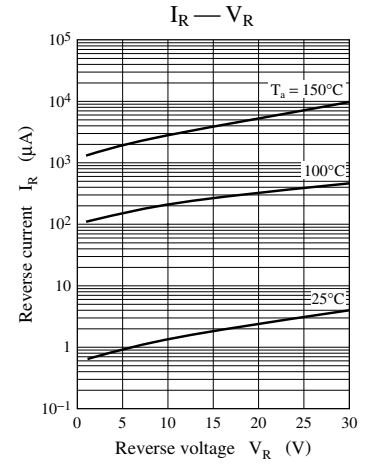
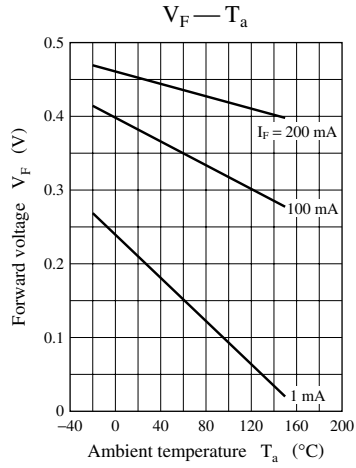
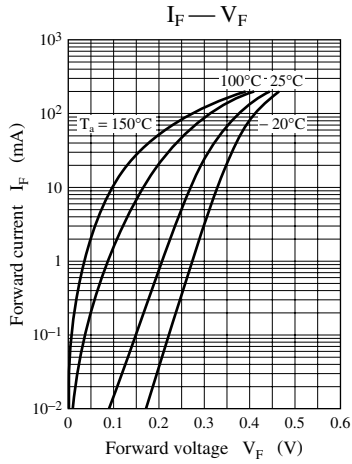


Marking Symbol: M3C

Internal Connection



Note) The part number in the parenthesis shows conventional part number.



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