

MA3X704, MA3X704A (MA704, MA704A)

Silicon epitaxial planar type

For switching

For wave detection

■ Features

- Low forward voltage V_F and good wave detection efficiency η
- Small temperature coefficient of forward characteristic
- Small reverse current I_R
- Mini type 3-pin package

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

| Parameter | Symbol | Rating | Unit | |
|----------------------|-----------|-------------|------------------|---|
| Reverse voltage (DC) | MA3X704 | V_R | 15 | V |
| | MA3X704A | | 30 | |
| Peak reverse voltage | MA3X704 | V_{RM} | 15 | V |
| | MA3X704A | | 30 | |
| Peak forward current | I_{FM} | 150 | mA | |
| Forward current (DC) | I_F | 30 | mA | |
| Junction temperature | T_j | 125 | $^\circ\text{C}$ | |
| Storage temperature | T_{stg} | -55 to +125 | $^\circ\text{C}$ | |

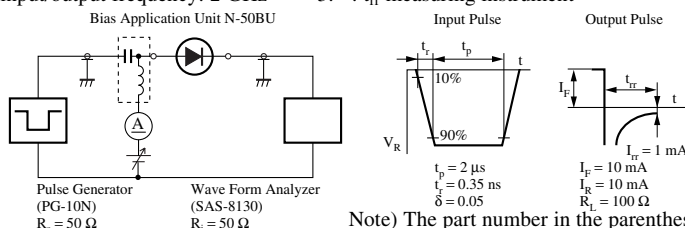
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|----------|---|-----|-----|-----|------|
| Reverse current (DC) | MA3X704 | $V_R = 15\text{ V}$ | | | 200 | nA |
| | MA3X704A | $V_R = 30\text{ V}$ | | | 300 | |
| Forward voltage (DC) | V_{F1} | $I_F = 1\text{ mA}$ | | | 0.4 | V |
| | V_{F2} | $I_F = 30\text{ mA}$ | | | 1 | |
| Terminal capacitance | C_t | $V_R = 1\text{ V}, f = 1\text{ MHz}$ | | 1.5 | | pF |
| Reverse recovery time * | t_{rr} | $I_F = I_R = 10\text{ mA}$ $I_{rr} = 1\text{ mA}, R_L = 100\ \Omega$ | | 1 | | ns |
| Detection efficiency | η | $V_{in} = 3\text{ V}_{(peak)}, f = 30\text{ MHz}$ $R_L = 3.9\text{ k}\Omega, C_L = 10\text{ pF}$ | | 65 | | % |

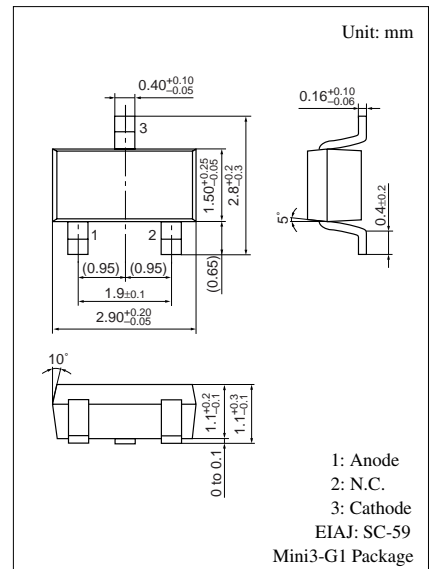
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 2 GHz

3. *: t_{rr} measuring instrument



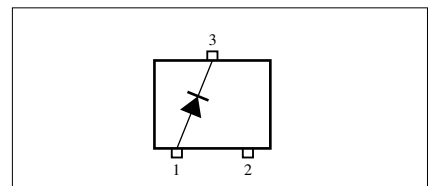
Note) The part number in the parenthesis shows conventional part number.



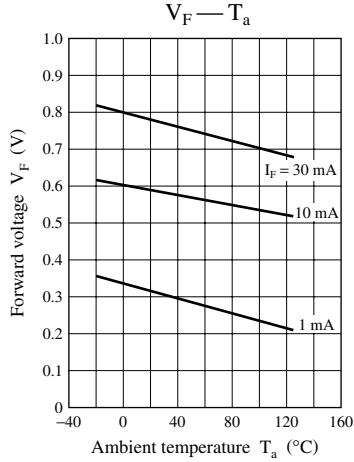
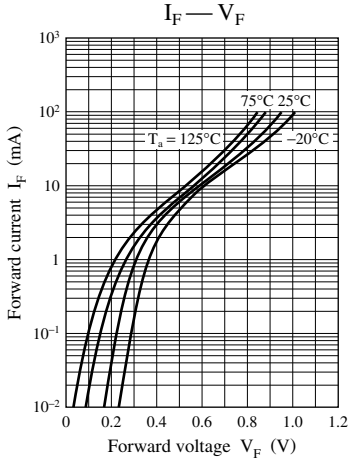
Marking Symbol

- MA3X704: M1K
- MA3X704A: M1L

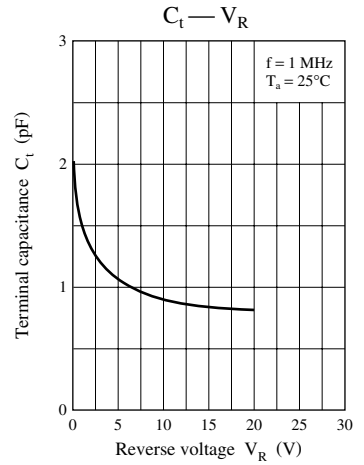
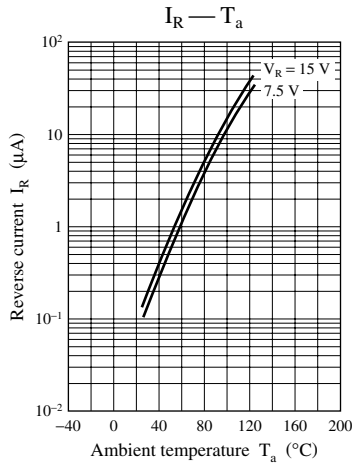
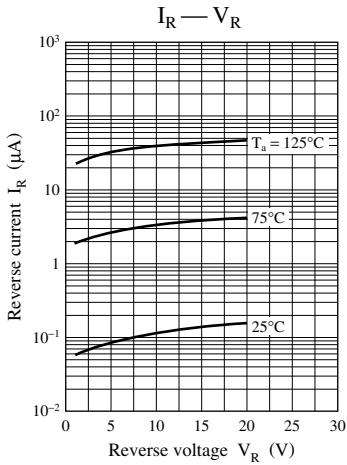
Internal Connection



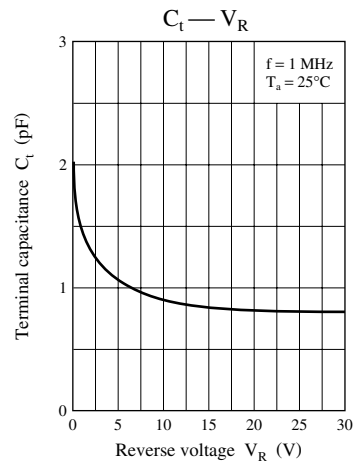
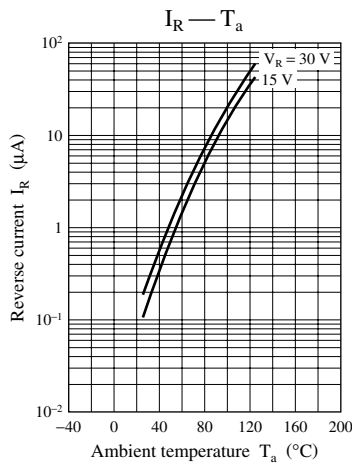
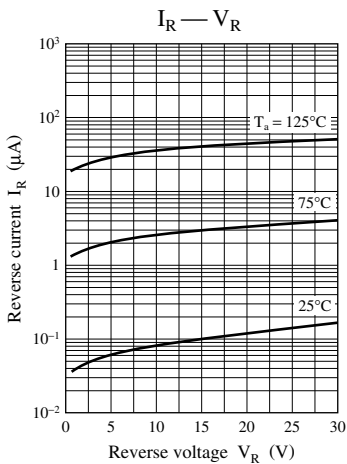
Characteristics charts common to all



Characteristics charts of MA3X704



Characteristics charts of MA3X704A



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