MA3J741 (MA741)

Silicon epitaxial planar type

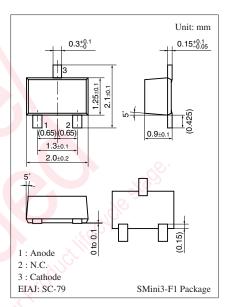
For switching

■ Features

- Mini type of MA3X704A (MA704A)
- Low forward voltage V_F and good wave detection efficiency η
- Small temperature coefficient of forward characteristic
- Small reverse current I_R

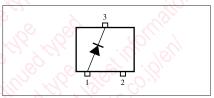
■ Absolute Maximum Ratings $T_a = 25$ °C

| Parameter | Symbol | Rating | Unit | |
|------------------------------|------------------|-------------|------|--|
| Reverse voltage | V_R | 30 | V | |
| Maximum peak reverse voltage | V _{RM} | 30 | V | |
| Forward current | I_{F} | 30 | mA | |
| Peak forward current | I_{FM} | 150 | mA | |
| Junction temperature | T _j | 125 | °C | |
| Storage temperature | T _{stg} | -55 to +125 | °C | |



Marking Symbol: M1L

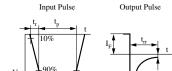
Internal Connection



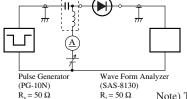
■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

| Parameter | Symbol | Conditions | Min | Тур | Max | Unit |
|-------------------------|-----------------|--|-----|----------|-----|------|
| Forward voltage | V_{F1} | $I_F = 1 \text{ mA}$ | 2/1 | <i>y</i> | 0.4 | V |
| | V_{F2} | $I_F = 30 \text{ mA}$ | 7.6 | | 1.0 | |
| Reverse current | I_R | $V_R = 30 \text{ V}$ | | | 300 | nA |
| Terminal capacitance | C _t | $V_R = 1 \text{ V, f} = 1 \text{ MHz}$ | | 1.5 | | pF |
| Reverse recovery time * | t _{rr} | $I_F = I_R = 10 \text{ mA}$ | | 1.0 | | ns |
| | | $I_{rr} = 1 \text{ mA}, R_L = 100 \Omega$ | | | | |
| Detection efficiency | η | $V_{IN} = 3 V_{(peak)}$, $f = 30 MHz$ | | 65 | | % |
| | | $R_L = 3.9 \text{ k}\Omega, C_L = 10 \text{ pF}$ | | | | |

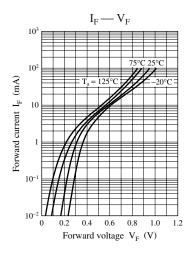
- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
 - 2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
 - 3. Absolute frequency of input and output is 2 GHz.

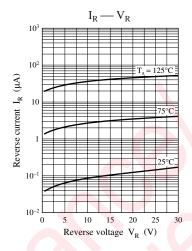


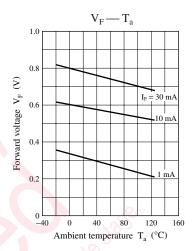
4.*: t_{rr} measurement circuit

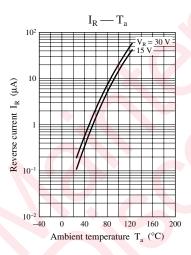


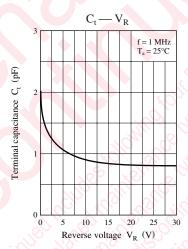
Bias Application Unit (N-50BU)











2 SKH00054BED

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