

MA3G655 (MA655)

Silicon planar type (cathode common)

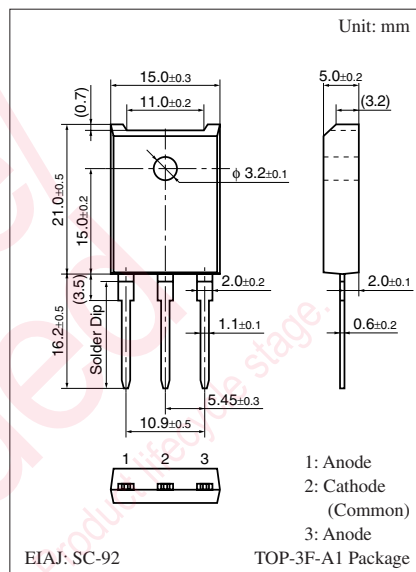
For high-frequency rectification

■ Features

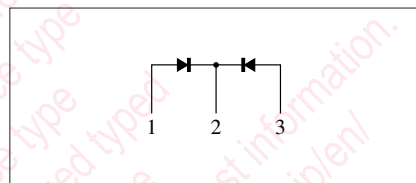
- High reverse voltage V_R
- Low forward voltage V_F
- Fast reverse recovery time t_{rr}

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

| Parameter | Symbol | Rating | Unit |
|---|-------------|-------------|------------------|
| Repetitive peak reverse voltage | V_{RRM} | 300 | V |
| Non-repetitive peak reverse surge voltage | V_{RSM} | 300 | V |
| Forward current (Average) | $I_{F(AV)}$ | 20 | A |
| Non-repetitive peak forward surge current | I_{FSM} | 150 | A |
| Junction temperature | T_j | -40 to +150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -40 to +150 | $^\circ\text{C}$ |



Internal Connection



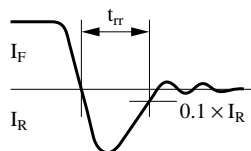
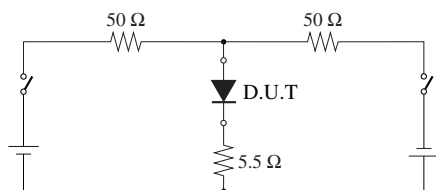
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|---------------------------------|---------------|---|-----|-----|-----|---------------------------|
| Forward voltage | V_F | $I_F = 10\text{ A}, T_C = 25^\circ\text{C}$ | | | 1.0 | V |
| Repetitive peak reverse current | I_{RRM1} | $V_{RRM} = 300\text{ V}, T_C = 25^\circ\text{C}$ | | | 20 | μA |
| | | $V_{RRM} = 300\text{ V}, T_j = 150^\circ\text{C}$ | | | 5 | mA |
| Reverse recovery time * | t_{rr} | $I_F = 1\text{ A}, I_R = 1\text{ A}$ | | | 50 | ns |
| Thermal resistance (j-c) | $R_{th(j-c)}$ | | | | 1.5 | $^\circ\text{C}/\text{W}$ |
| Thermal resistance (j-a) | $R_{th(j-a)}$ | | | | 40 | $^\circ\text{C}/\text{W}$ |

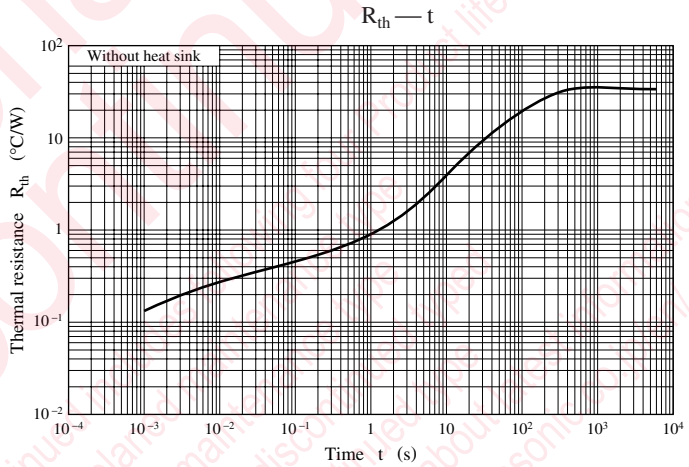
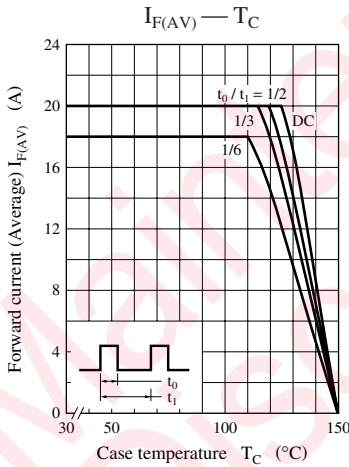
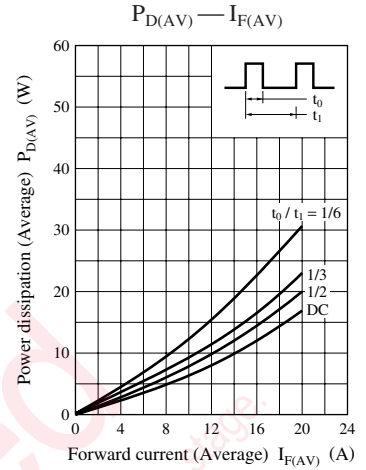
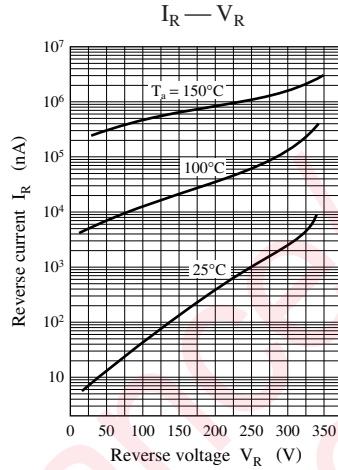
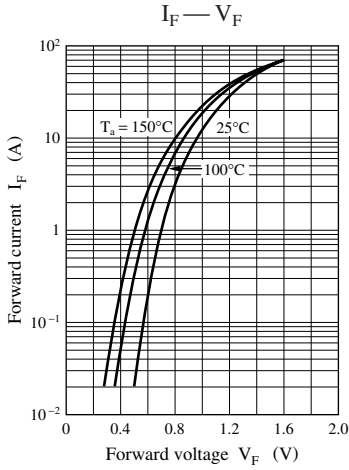
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 10 MHz.

3. *: t_{rr} measurement circuit



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



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