MA3J143 (MA143), **MA3J143A** (MA143A)

Silicon epitaxial planar type

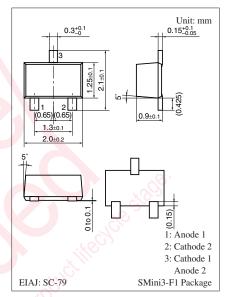
For switching circuits

■ Features

- Two isolated elements contained in one package, allowing highdensity mounting
- Two diodes are connected in series in the package

■ Absolute Maximum Ratings $T_a = 25$ °C

| Parameter | | Symbol | Rating | Unit | |
|----------------------|----------|------------------|-------------|---------|--|
| Reverse voltage | MA3J143 | V_R | 40 | V | |
| | MA3J143A | | 80 | | |
| Maximum peak | MA3J143 | V _{RM} | 40 | V | |
| reverse voltage | MA3J143A | | 80 | | |
| Forward current | Single | I_{F} | 100 | mA | |
| | Series | | 65 | | |
| Peak forward | Single | I_{FM} | 200 | mA | |
| current | Series | | 130 | j, | |
| Junction temperature | | T _j | 150 | °C/O | |
| Storage temperature | | T_{stg} | -55 to +150 | °C | |
| | | | | VOIS XV | |

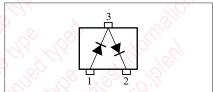


Marking Symbol:

MA3J143: MC

MA3J143A: MP

Internal Connection

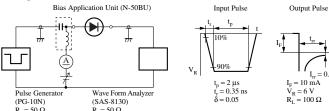


■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

| Parameter | | Symbol | Conditions | Min | Тур | Max | Unit |
|-------------------------|----------|---------------------|--|-----|-----|-----|------|
| Forward voltage | | $V_{\rm F}$ | $I_F = 100 \text{ mA}$ | 7 | 85 | 1.2 | V |
| Reverse voltage | MA3J143 | V_R | $I_R = 100 \mu A$ | 40 | | | V |
| | MA3J143A | 5 | | 80 | | | |
| Reverse current | MA3J143 | I_R | $V_R = 40 \text{ V}$ | | | 100 | nA |
| | MA3J143A | | V _R = 75 V | | | 100 | |
| Terminal capacitance | <i>S</i> | C _{t1} *1 | $V_R = 0 V, f = 1 MHz$ | | | 5.5 | pF |
| | | C _{t2} *2 | 1/2 //4 | | | 3.0 | |
| Reverse recovery time * | 3 | t _{rr1} *1 | $I_F = 10 \text{ mA}, V_R = 6 \text{ V}$ | | 150 | | ns |
| | | t _{rr2} *2 | $I_{rr} = 0.1 I_R$, $R_L = 100 \Omega$ | | 9 | | |

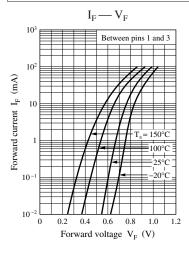
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

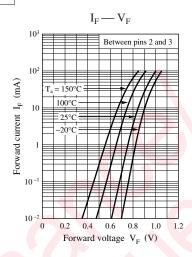
- 2. Absolute frequency of input and output is 100 MHz.
- 3. *1: Between pins 2 and 3
 - *2: Between pins 1 and 3
 - *3: t_{rr} measurement circuit

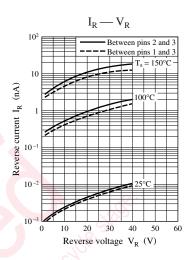


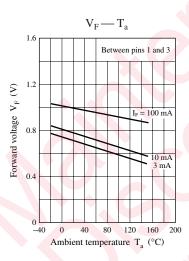
Note) The part numbers in the parenthesis show conventional part number.

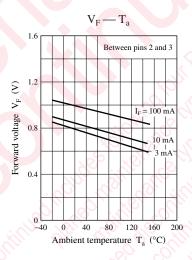
Characteristics charts of MA3J143

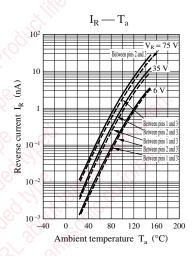


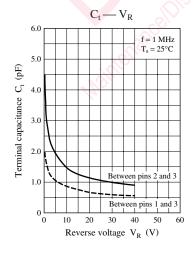


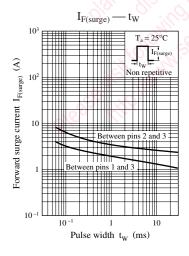








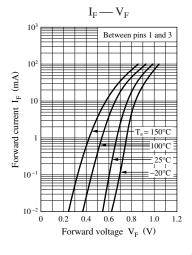


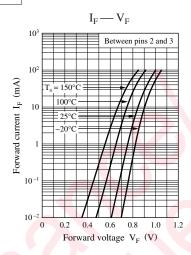


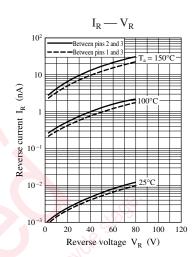
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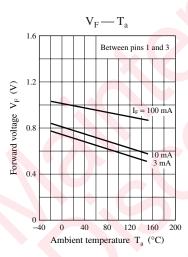
Panasonic

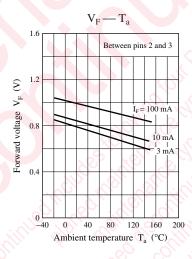
Characteristics charts of MA3J143A

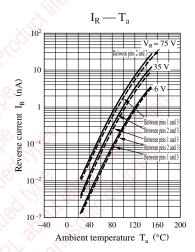


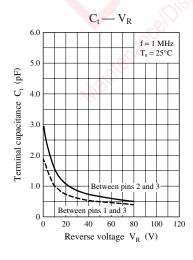


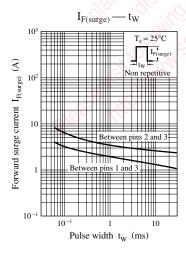












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