

Rev.H Apr.-2018

SOD-323

Silicon Diode in a SOD-323 Plastic Package.

Small signal diode . HF Product.

Switching diodes.



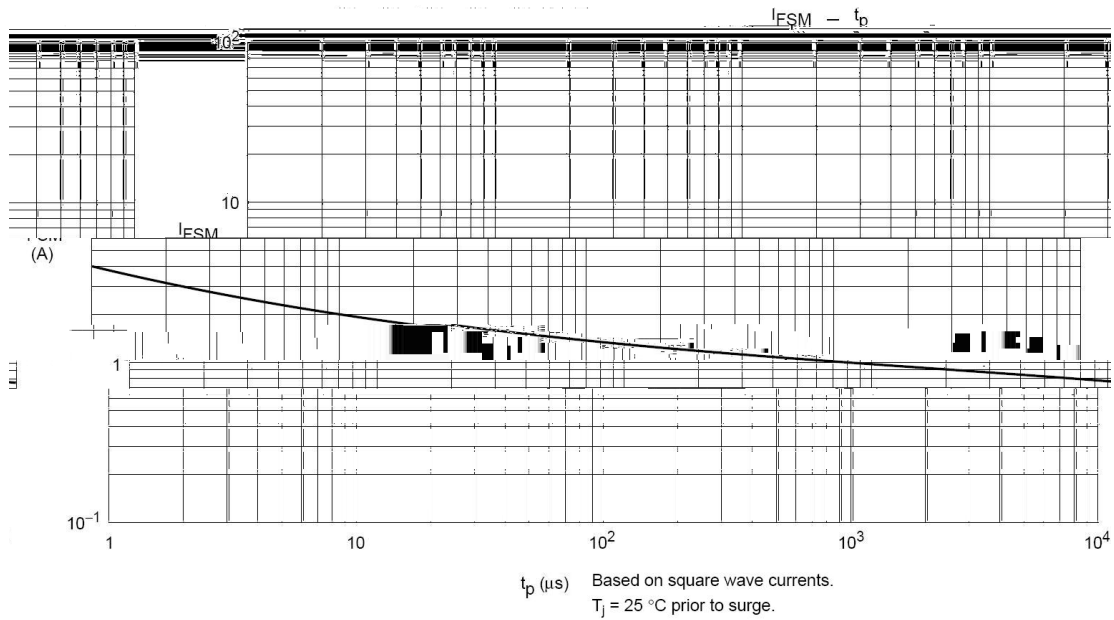
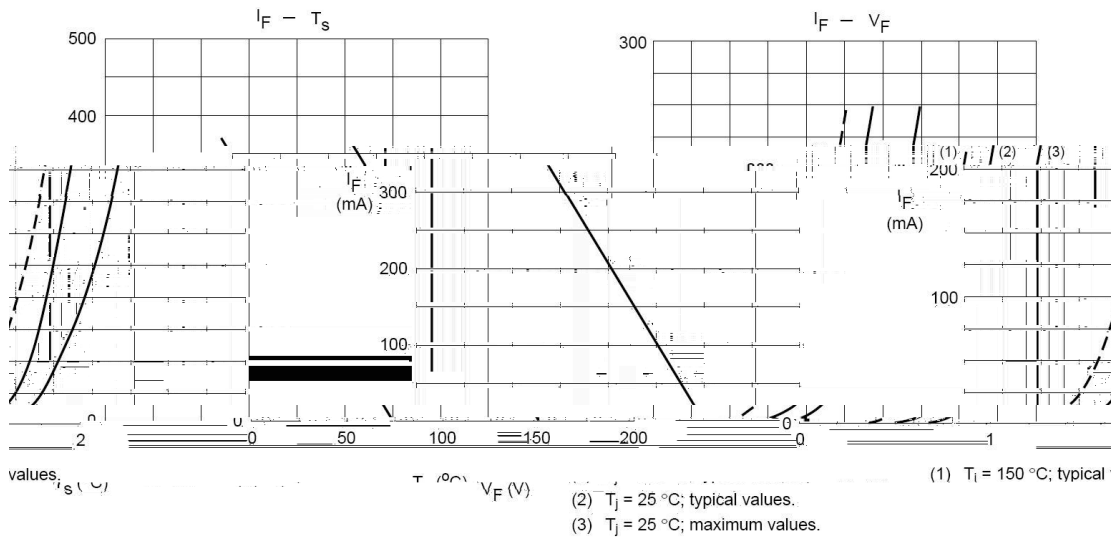
PIN1:Cathode

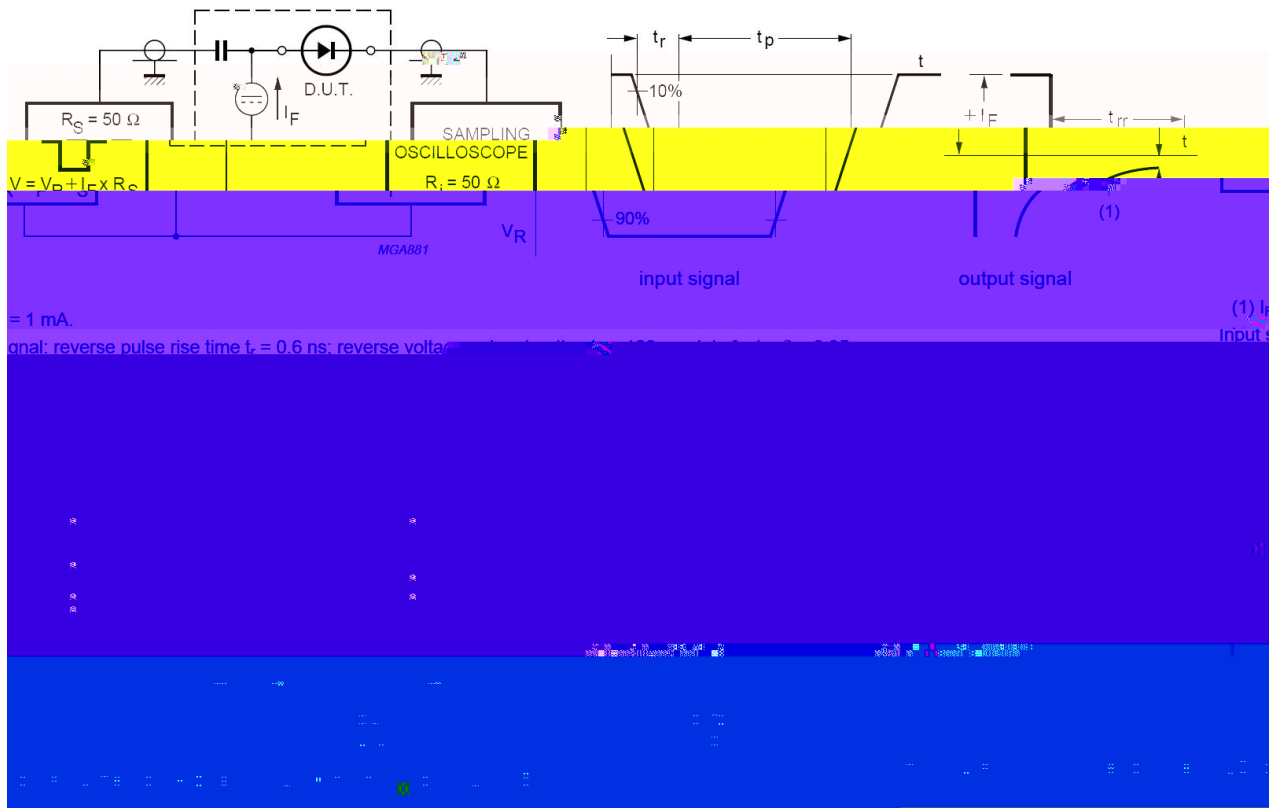
PIN2:Anode

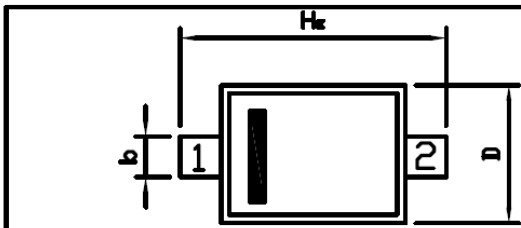
|         |     |
|---------|-----|
| Marking | A6H |
|---------|-----|

| Parameter   | Symbol                                 | Rating  | Unit             |
|---|--|---------|------------------|
| Repetitive peak reverse voltage                     | $V_{RRM}$                              | 85      | V                |
| Continuous forward current                          | $I_{F(AV)}$ ( $T_s=90^\circ\text{C}$ ) | 250     | mA               |
| Non-repetitive peak forward current                 | $I_{FSM(1)(t=1S)}$                     | 0.5     | A                |
|   | $I_{FSM(2)(t=1mS)}$                    | 1.0     | A                |
| Total power dissipation                             | $P_{tot}$ ( $T_s=90^\circ\text{C}$ )   | 400     | mW               |
| Thermal resistance from junction to soldering point | $R_{J-S}$                              | 150     | K/W              |
| Junction Temperature                                | $T_j$                                  | 150     | $^\circ\text{C}$ |
| Storage Temperature Range                           | $T_{stg}$                              | -65~150 | $^\circ\text{C}$ |

| Parameter                | Symbol   | Test Conditions                                | Min | Typ | Max  | Unit          |
|--------------------------|----------|--|-----|-----|------|---------------|
| Forward Voltage          | $V_F$    | $I_F=1\text{mA}$                               |     |     | 715  | mV            |
|                          |          | $I_F=10\text{mA}$                              |     |     | 855  | mV            |
|                          |          | $I_F=50\text{mA}$                              |     |     | 1.0  | V             |
|                          |          | $I_F=150\text{mA}$                             |     |     | 1.25 | V             |
| Reverse Current          | $I_R$    | $V_R=25\text{V}$                               |     |     | 30   | nA            |
|                          |          | $V_R=75\text{V}$                               |     |     | 1.0  | $\mu\text{A}$ |
|                          |          | $V_R=25\text{V}$ $T_j=150^\circ\text{C}$       |     |     | 30   | $\mu\text{A}$ |
|                          |          | $V_R=75\text{V}$ $T_j=150^\circ\text{C}$       |     |     | 50   | $\mu\text{A}$ |
| Diode capacitance        | $C_d$    | $V_R=0$ $f=1.0\text{MHz}$                      |     |     | 1.5  | pF            |
| Reverse Recovery Time    | $t_{rr}$ | $I_F=10\text{mA}$ $I_R=1.0\text{mA}$ $R_L=100$ |     |     | 4.0  | ns            |
| Forward recovery voltage | $V_{fr}$ | $I_F=10\text{mA}$ $T_r=20\text{ns}$            |     |     | 1.75 | V             |



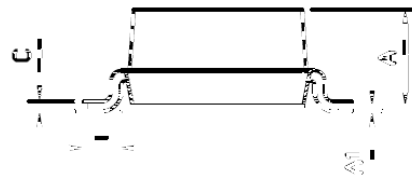




|   |      |      |
|---|------|------|
| A | 0.50 | 0.20 |
| b | 0.25 | 0.40 |
| C | 0.08 | 0.18 |
| D | 1.20 | 1.40 |
| E | 1.40 | 1.80 |
| H | 2.50 | 2.80 |
| L | 0.20 | 0.45 |

Unit: mm

| 尺寸<br>符号 | SOD-323 |      |
|----------|---------|------|
|          | min     | max  |
| A        | 0.80    | 1.15 |



PIN: 1CA 2AN

SOD-323

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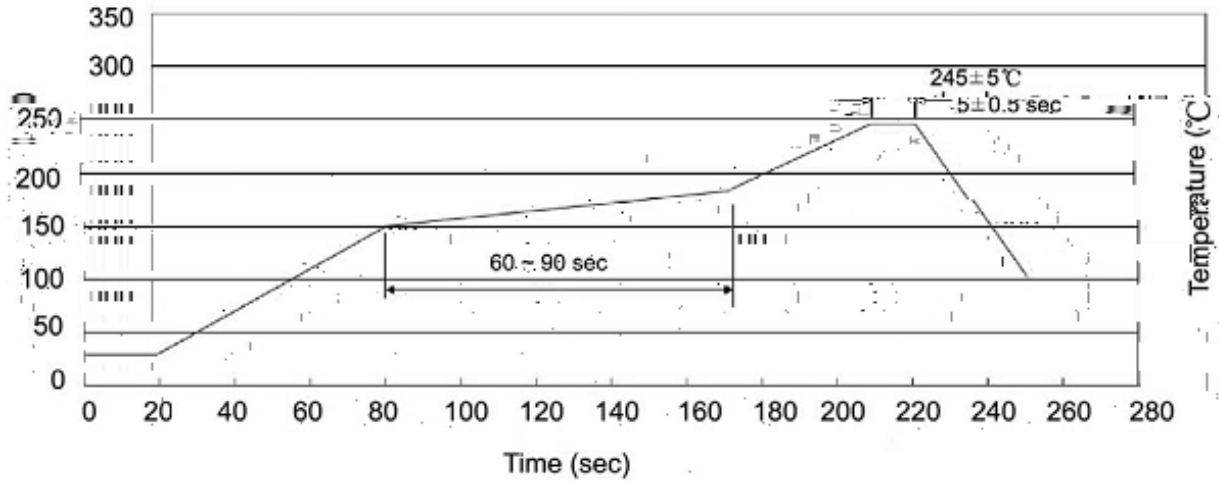
A6

H:

Note:

A6: Product Type Code

H Company Code



Note:

- |   |       |     |       |        |   |
|---|-------|-----|-------|--------|---|
| 1 | 150   | 180 | 60    | 90sec; | 1.Preheating: 150 180 , Time:60~90sec.  |
| 2 | 245±5 |     | 5±0.5 | sec;   | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 |       | 2   | 10    | /sec.  | 3. Cooling Speed: 2~10 /sec.            |

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

| Package Type<br>封装形式 | Units 包装数量         |                         |                        |                              |                        | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |             |             |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|---|-------------|-------------|
|                      | Units/Reel<br>只/卷盘 | Reels/Inner Box<br>卷盘/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Reel                                    | Inner Box 盒 | Outer Box 箱 |
| SOD-323              | 3,000              | 10                      | 30,000                 | 6                            | 180,000                | 7" x8                                   | 180×120×180 | 390×385×205 |