SOT-323 Silicon Diode in a SOT-323 Plastic Package.

SMD

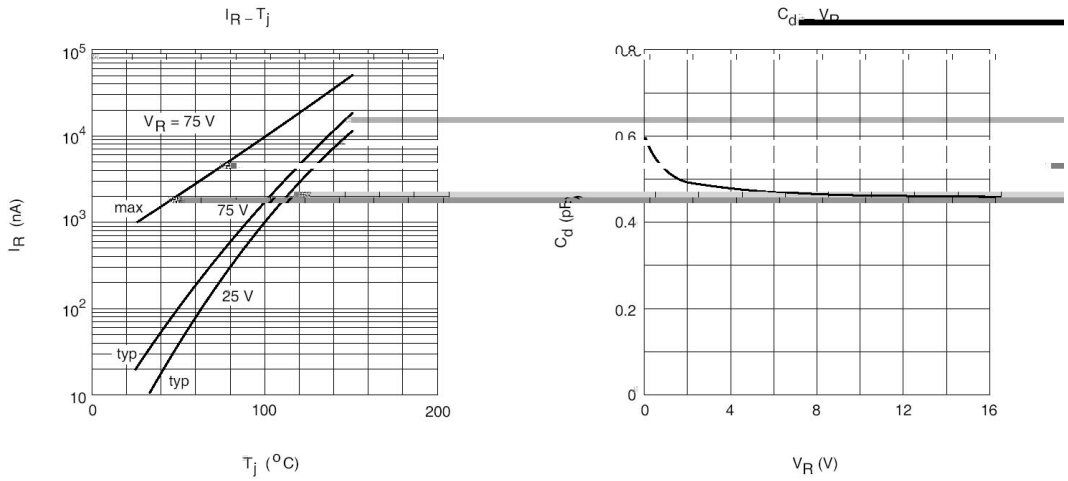
Very small plastic SMD package, High switching speed, High Continuous reverse and Repetitive peak reverse voltage, High Repetitive peak forward current,HF Product.

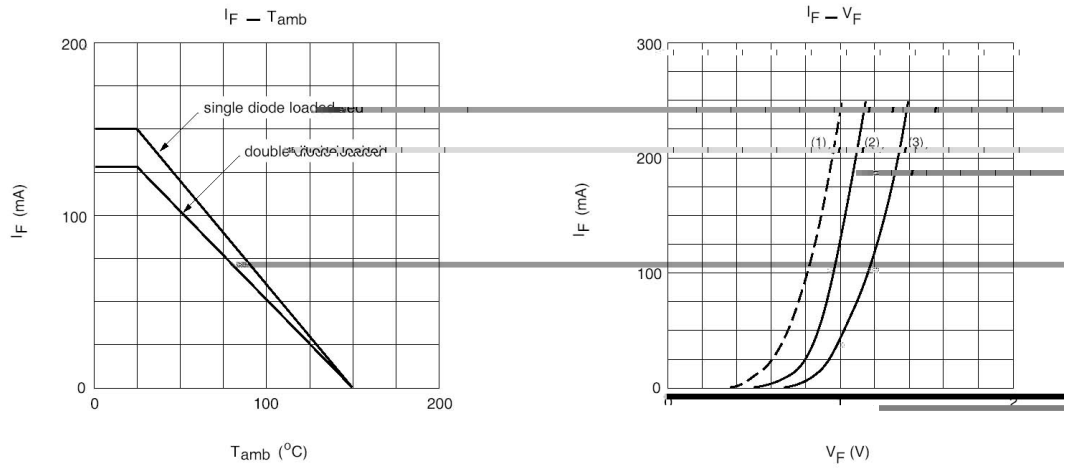
Applications for High-speed switching. surface mounted circuits.

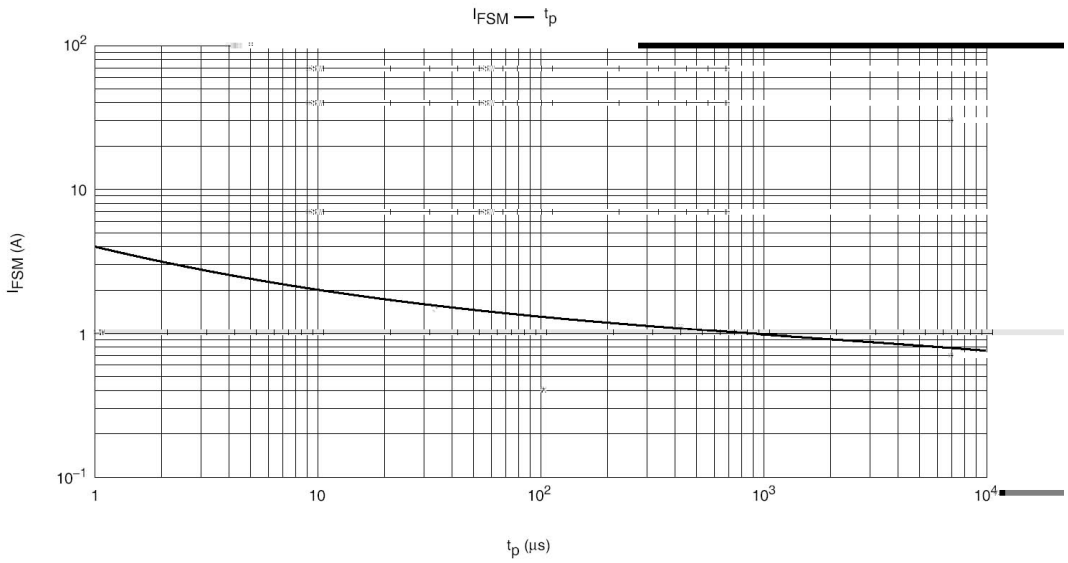
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Repetitive Reverse Voltage | $V_{RRM}$ | 85 | V |
| Continuous reverse voltage | $V_R$ | 75 | V |
| Continuous forward current | $I_{F(1)}$ | 150 | mA |
| | $I_{F(2)}$ | 130 | mA |
| Repetitive peak forward current | $I_{FRM}$ | 500 | mA |
| Non-repetitive Peak Forward Current | $I_{FSM(1)(t=1\ S)}$ | 0.5 | A |
| | $I_{FSM(2)(t=1\ mS)}$ | 1.0 | A |
| | $I_{FSM(3)(t=1\mu S)}$ | 4.0 | A |
| Power Dissipation | $P_D$ | 200 | mW |
| Junction Temperature | $T_j$ | 150 | |
| Storage Temperature Range | $T_{stg}$ | -55 +150 | |

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Forward Voltage | $V_F$ | $I_F$=1mA | | | 715 | mV |
| | | $I_F$=10mA | | | 855 | mV |
| | | $I_F$=50mA | | | 1 | V |
| | | $I_F$=150mA | | | 1.25 | V |
| Instantaneous Reverse Current<br>Total Capacitance | $I_R$ | $V_R$=25V | | | 30 | nA |
| | | $V_R$=75V | | | 1 | μA |
| | | $V_R$=25V $T_j$=150 | | | 30 | μA |
| | | $V_R$=75V $T_j$=150 | | | 50 | μA |
| Diode capacitance | $C_d$ | $V_R$=0 f=1MHz | | | 1.5 | pF |
| Reverse Recovery Time | $t_{rr}$ | $I_R$ | | | | |

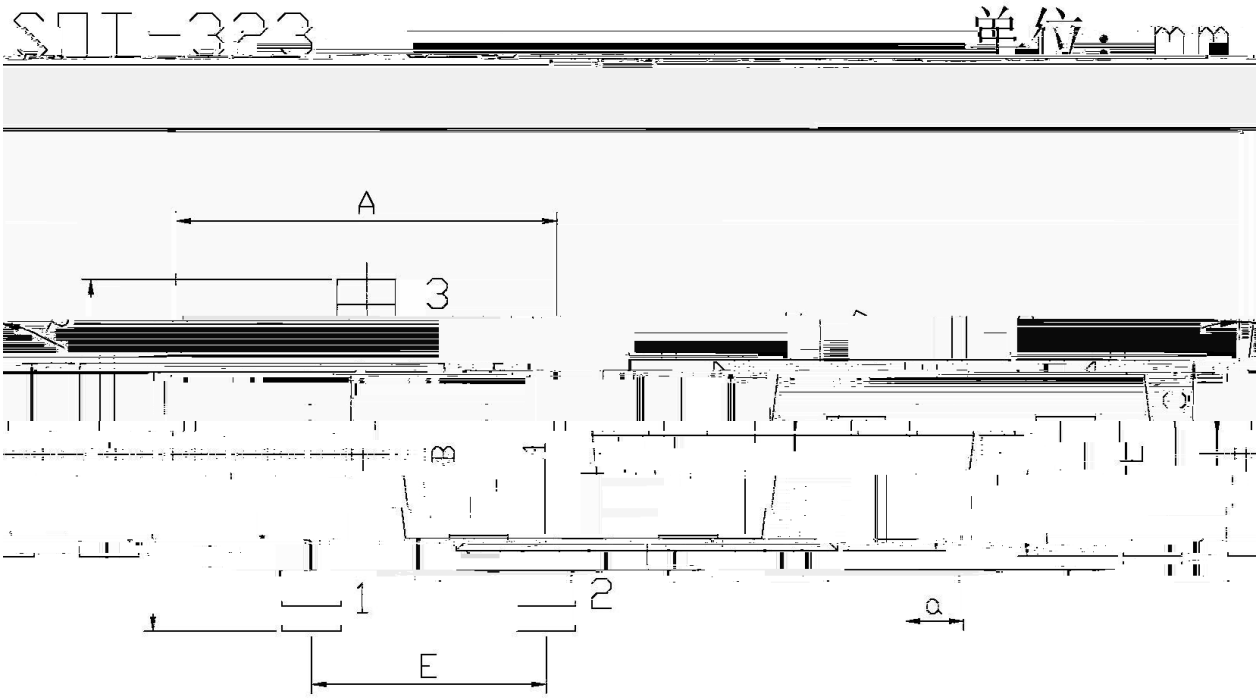
## / Electrical Characteristic Curve

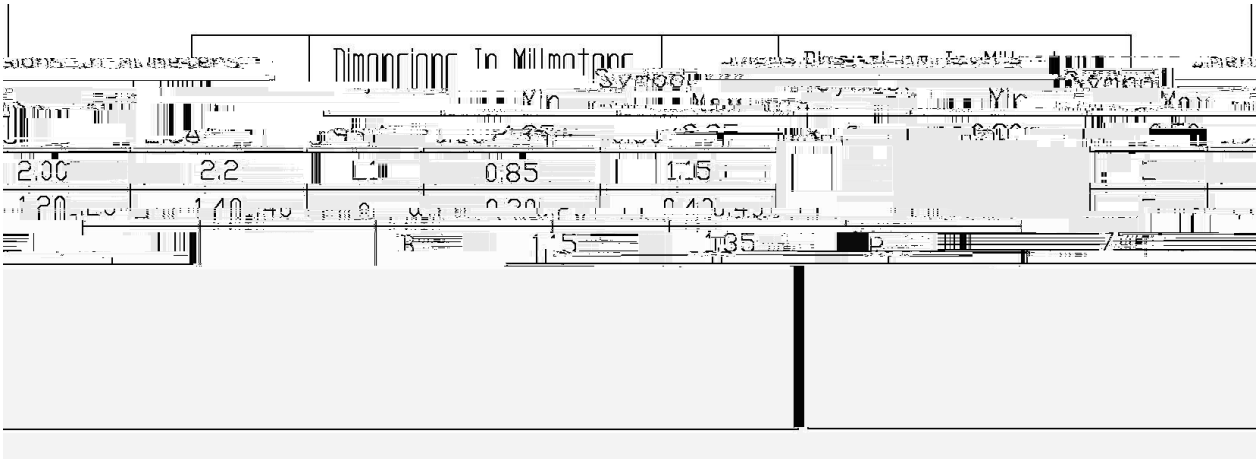


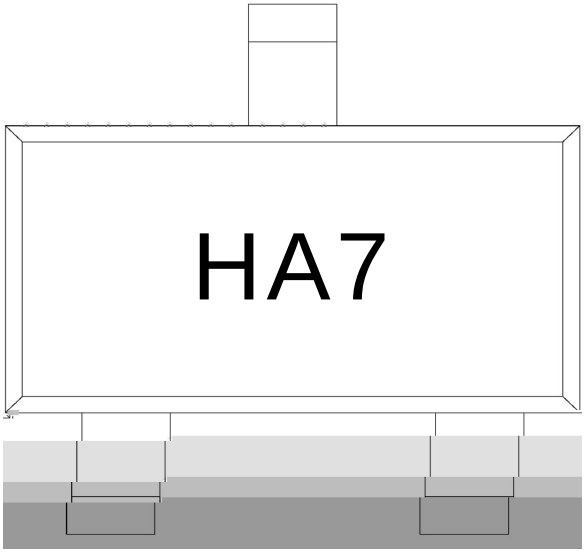



## / Package Dimensions



## / Marking Instructions




H

A7

Note:

H: Company Code

A7: Product Type

## ( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)

| |
|---|
| |
| |
| |
| |
| |
| |

Note:

1 150 180 60 90sec;

2 245±5 5±0.5sec;

3 2 10 /sec.

1.Preheating:150~180 , Time:60~90sec.

2.Peak Temp.:245±5 , Duration:5±0.5sec.

3. Cooling Speed: 2~10 /sec.

## / Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

## / Packaging SPEC.

/ REEL