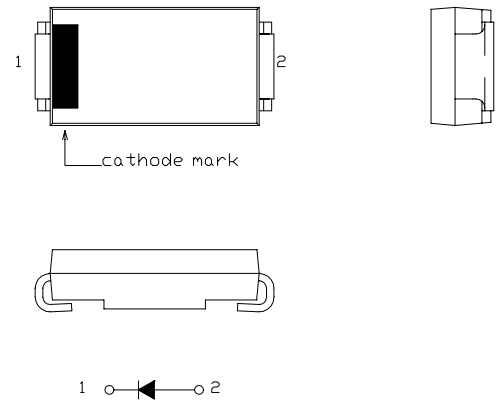


# OUTLINE DRAWING

## DIODE Type : NSD03A20

### FEATURES

- \* **FLAT-PAK** Surface Mount Device
- \* High Surge Capability
- \* Low Forward Voltage Drop
- \* Low Reverse Leakage Current
- \* Packaged in 16mm Tape and Reel
- \* Not Rolling During Assembly



### Maximum Ratings

Approx Net Weight:016g

| Rating                              | Symbol              | NSD03A20    |                                           |                                    | Unit |
|-------------------------------------|---------------------|-------------|-------------------------------------------|------------------------------------|------|
| Repetitive Peak Reverse Voltage     | V <sub>RRM</sub>    | 200         |                                           |                                    | V    |
| Average Rectified Output Current    | I <sub>O</sub>      | 1.57        | Ta=25 °C *1                               | 50Hz Half Sine Wave Resistive Load | A    |
|                                     |                     | 3.0         | T1=108 °C *2                              |                                    |      |
| RMS Forward Current                 | I <sub>F(RMS)</sub> | 4.71        |                                           |                                    | A    |
| Surge Forward Current               | I <sub>FSM</sub>    | 80          | 50Hz Half Sine Wave,1cycle Non-repetitive |                                    | A    |
| Operating JunctionTemperature Range | T <sub>jw</sub>     | -40 to +150 |                                           |                                    | °C   |
| Storage Temperature Range           | T <sub>stg</sub>    | -40 to +150 |                                           |                                    | °C   |

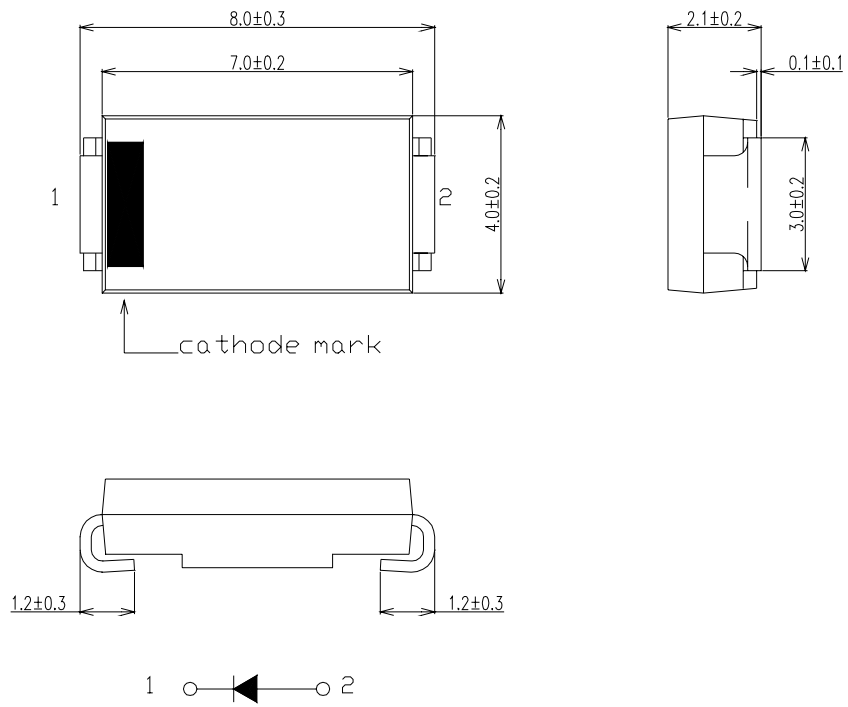
### Electrical • Thermal Characteristics

| Characteristics      | Symbol        | Conditions                                              | Min. | Typ. | Max. | Unit                        |
|----------------------|---------------|---------------------------------------------------------|------|------|------|-----------------------------|
| Peak Reverse Current | $I_{RM}$      | $T_j=25\text{ }^{\circ}\text{C}$ , $V_{RM}=V_{RRM}$     | -    | -    | 50   | $\mu\text{A}$               |
| Peak Forward Voltage | $V_{FM}$      | $T_j=25\text{ }^{\circ}\text{C}$ , $I_{FM}=3.0\text{A}$ | -    | -    | 1.0  | V                           |
| Thermal Resistance   | $R_{th(j-a)}$ | Junction to Ambient *1                                  | -    | -    | 89   | $^{\circ}\text{C}/\text{W}$ |
|                      | $R_{th(j-l)}$ | Junction to Lead                                        | -    | -    | 13   |                             |

\*1 Glass Epoxy Substrate Mounted (Soldering Lands=2x2mm, Both Sides)

\*2  $T_1$  = Lead Temperature

# NSD03A20 OUTLINE DRAWING (Dimensions in mm)



## SOLDERING PAD

