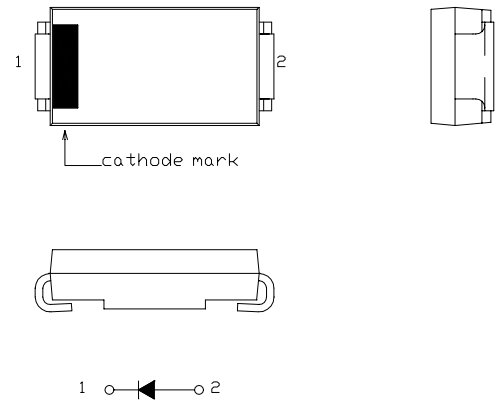


OUTLINE DRAWING

# DIODE Type : NSD03A40

## 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       | NSD03A40    |  |                                    | Unit             |
|--------------------------------------|--------------|-------------|--|------------------------------------|------------------|
| Repetitive Peak Reverse Voltage      | $V_{RRM}$    | 400         |  |                                    | V                |
| Average Rectified Output Current     | $I_O$        | 1.57        | $T_a=25\text{ }^\circ\text{C}$ *1          | 50Hz Half Sine Wave Resistive Load | A                |
|                                      |              | 3.0         | $T_l=108\text{ }^\circ\text{C}$ *2         |                                    |                  |
| RMS Forward Current                  | $I_{F(RMS)}$ | 4.71        |  |                                    | A                |
| Surge Forward Current                | $I_{FSM}$    | 80          | 50Hz Half Sine Wave, 1cycle Non-repetitive |                                    | A                |
| Operating Junction Temperature Range | $T_{jw}$     | -40 to +150 |  |                                    | $^\circ\text{C}$ |
| Storage Temperature Range            | $T_{stg}$    | -40 to +150 |  |                                    | $^\circ\text{C}$ |

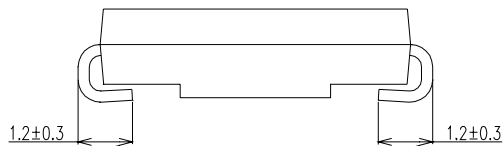
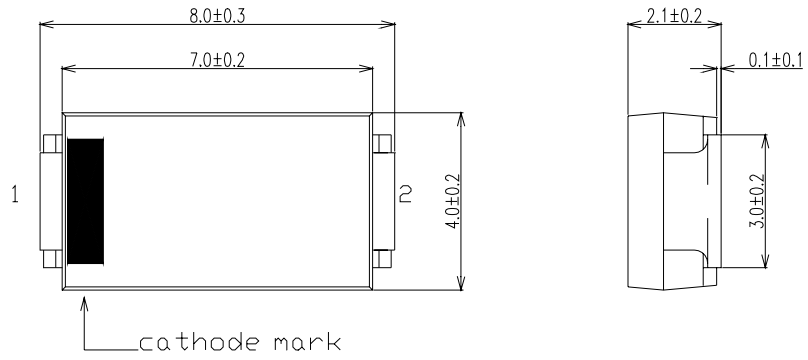
## Electrical • Thermal Characteristics

| Characteristics      | Symbol        | Conditions                                      | Min. | Typ. | Max. | Unit                      |
|----------------------|---------------|---|------|------|------|---------------------------|
| Peak Reverse Current | $I_{RM}$      | $T_j= 25^\circ\text{C}$ , $V_{RM}= V_{RRM}$     | -    | -    | 50   | $\mu\text{A}$             |
| Peak Forward Voltage | $V_{FM}$      | $T_j= 25^\circ\text{C}$ , $I_{FM}= 3.0\text{A}$ | -    | -    | 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  $T_l$ = Lead Temperature

NSD03A40 OUTLINE DRAWING (Dimensions in mm)



SOLDERING PAD

