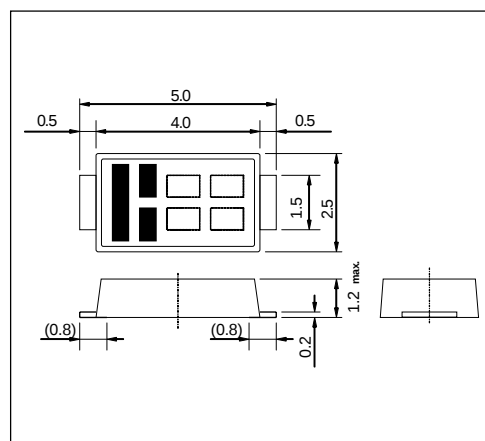


## SCHOTTKY BARRIER DIODE

## ■ Outline drawings, mm



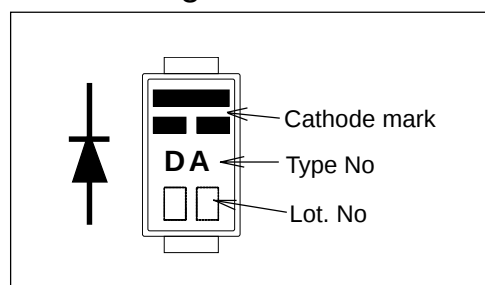
## ■ Features

- Surface-mount device
- Low  $V_F$
- Super high speed switching
- High reliability by planer design

## ■ Applications

- High speed switching

## ■ Marking



## ■ Maximum ratings and characteristics

- Absolute maximum ratings (at  $T_c=25^{\circ}\text{C}$  unless otherwise specified )

| Item                            | Symbol    | Conditions                                        | Rating      | Unit               |
|---------------------------------|-----------|---------------------------------------------------|-------------|--------------------|
| Repetitive peak reverse voltage | $V_{RRM}$ |                                                   | 40          | V                  |
| Average output current          | $I_o$     | Square wave duty=1/2<br>$T_l=125^{\circ}\text{C}$ | 2.0         | A                  |
| Surge current                   | $I_{FSM}$ | Sine wave 10ms,<br>1shot                          | 80          | A                  |
| Operating junction temperature  | $T_j$     |                                                   | 150         | $^{\circ}\text{C}$ |
| Storage temperature             | $T_{stg}$ |                                                   | -55 to +150 | $^{\circ}\text{C}$ |

- Electrical characteristics (at  $T_c=25^{\circ}\text{C}$  unless otherwise specified )

| Item                 | Symbol        | Conditions           | Max. | Unit                 |
|----------------------|---------------|----------------------|------|----------------------|
| Forward voltage drop | $V_{FM}$      | $I_{FM}=2.0\text{A}$ | 0.59 | V                    |
| Reverse current      | $I_{RRM}$     | $V_R=V_{RRM}$        | 0.1  | mA                   |
| Thermal resistance   | $R_{th(j-l)}$ | Junction to lead     | 18   | $^{\circ}\text{C/W}$ |

- Mechanical characteristics

|                  |       |   |
|------------------|-------|---|
| Approximate mass | 0.035 | g |
|------------------|-------|---|

(40V / 2.0A)

SD862-04 (2.0A)

## Characteristics

