

## Trench MOS Barrier Schottky Rectifier

**DO-201AD**  
**TSA8L60**



Cathode   Anode

### Features

- Advanced trench technology
- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

### Applications

- DC/DC Converters
- AC/DC Adaptors
- Switching Power Supplies
- Freewheeling Diodes

### Maximum ratings and electrical characteristics (T<sub>J</sub> = 25°C unless otherwise noted)

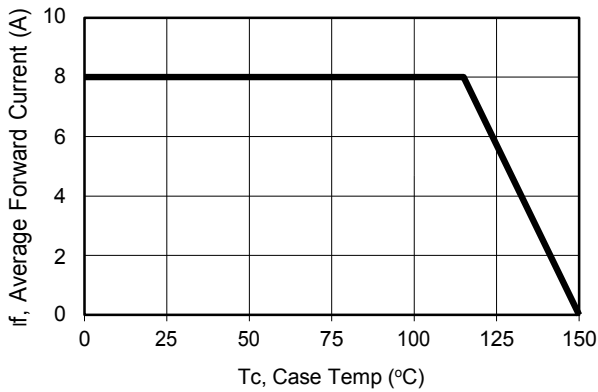
| Parameter   |          | Symbol   | Limit       |      | Unit |
|---|----------|----------|-------------|------|------|
| Maximum repetitive peak reverse voltage   |          | VRRM     | 60          |      | V    |
| Maximum average forward rectified current   |          | IF(AV)   | 8           |      | A    |
| Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode |          | IFSM     | 150         |      | A    |
| Operating junction and storage temperature range  |          | TJ, TSTG | -50 to +150 |      | °C   |
| Typical thermal resistance per leg  | DO-201AD | RθJC     | 22          |      | °C/W |
| Instantaneous forward voltage per diode   |          |          | TYP.        | MAX. | V    |
|   | IF=2A    | TJ=25°C  | 0.35        | 0.38 |      |
|   | IF=2A    | TJ=125°C | 0.30        | -    |      |
|   | IF=8A    | TJ=25°C  | 0.49        | 0.54 |      |
|   | IF=8A    | TJ=125°C | 0.44        | -    |      |
| Instantaneous reverse current per diode at rated reverse voltage                              | TJ=25°C  | IR(2)    | -           | 100  | uA   |
|   | TJ=125°C |          | -           | 100  | mA   |

Notes:

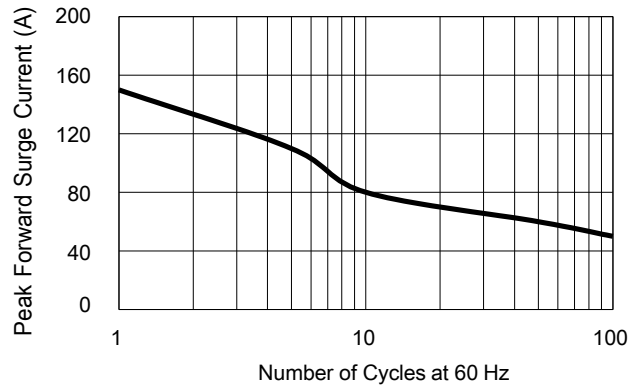
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≦ 40 ms

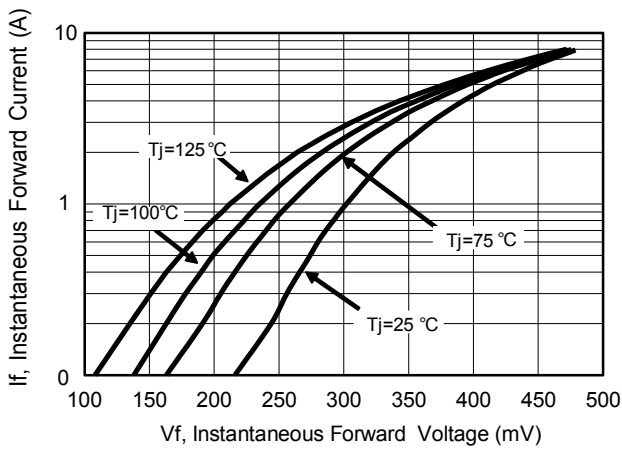
## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



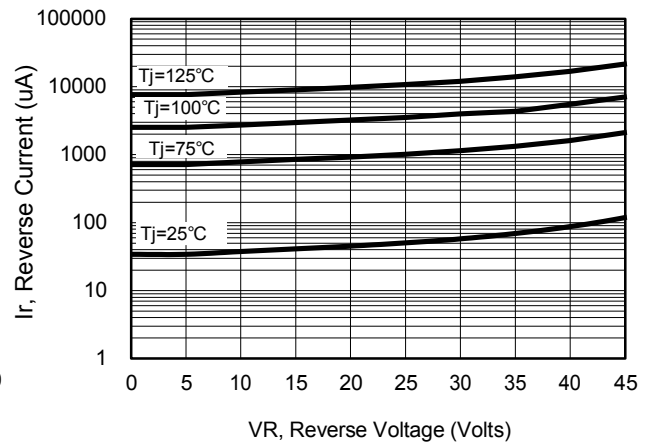
**Current Derating, Case**



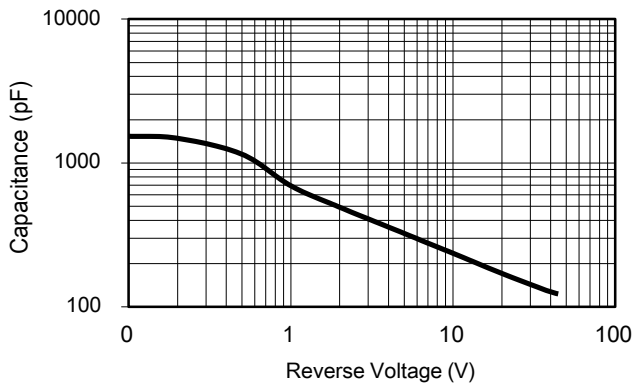
**Maximum Repetitive Surge Current**



**Typical Forward Voltage**



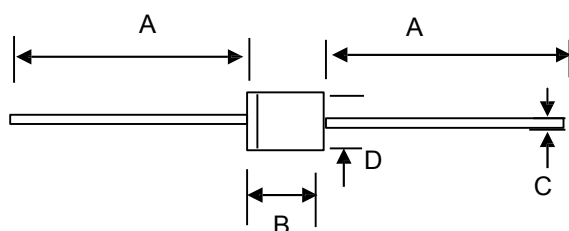
**Typical Reverse Current**



**Typical Junction Capacitance**

## PACKAGE OUTLINE DIMENSIONS

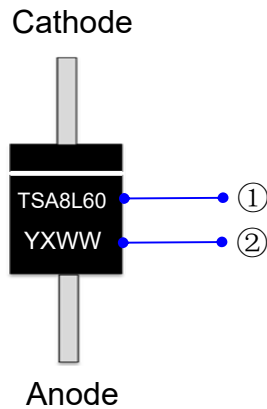
### DO-201AD



### DO-201AD mechanical data

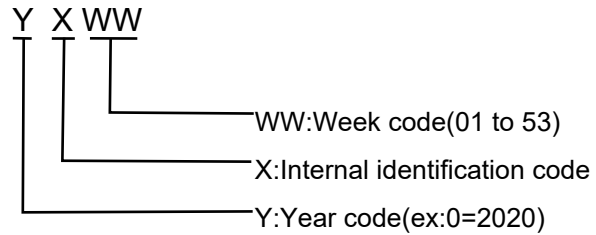
| UNIT |     | A       | B      | C     | D      |
|------|-----|---------|--------|-------|--------|
| mm   | max | 26.5    | 9.5    | 1.4   | 5.3    |
|      | min | 24.5    | 7.3    | 1.1   | 4.8    |
| mil  | max | 1043.30 | 374.01 | 55.12 | 208.67 |
|      | min | 946.57  | 287.40 | 39.37 | 188.97 |

## Marking Information



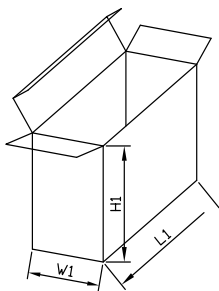
① Product model : TSA8L60

② PDC information:

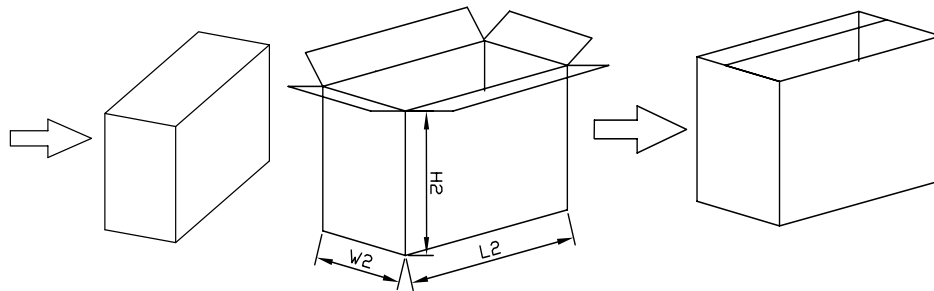


## Packaging Information

1. Inside Box



2. Outside Box



## Packaging Information

| NO   | UNIT      | Inside Box                      |    |                | Outside Box                        |     |     |
|------|-----------|---------------------------------|----|----------------|------------------------------------|-----|-----|
|      |           | L1                              | W1 | H1             | L2                                 | W2  | H2  |
| Size | mm        | 255                             | 75 | 1115           | 415                                | 280 | 320 |
| QTY  | PCS       | Smallest package,1000PCS/carton |    |                | 10,000PCS/carton,10 boxes in total |     |     |
| Note | Tolerance | ≤20mm,±3mm;                     |    | 21-100mm,±5mm; | 101-500mm,±10mm                    |     |     |