

# Switching diode

## RLS245

### ●Applications

High voltage switching  
General purpose rectification

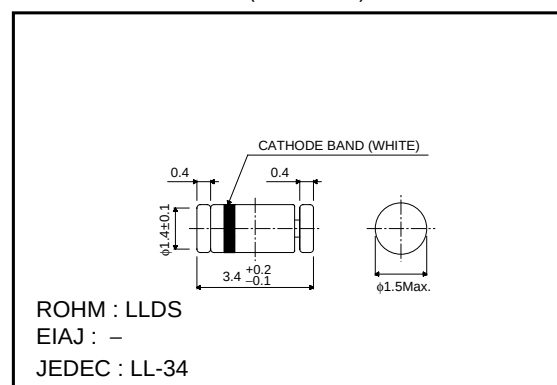
### ●Features

- 1) Small surface mounting type. (LLDS)
- 2)  $V_{RM}=250V$  guaranteed.
- 3) High reliability

### ●Construction

Silicon epitaxial planar

### ●External dimensions (Units : mm)



### ●Absolute maximum ratings (Ta=25°C)

| Parameter               | Symbol      | Limits   | Unit |
|-------------------------|-------------|----------|------|
| Peak reverse voltage    | $V_{RM}$    | 250      | V    |
| DC reverse voltage      | $V_R$       | 220      | V    |
| Peak forward current    | $I_{FM}$    | 625      | mA   |
| Mean rectifying current | $I_O$       | 200      | mA   |
| Surge current (1s)      | $I_{surge}$ | 1000     | mA   |
| Power dissipation       | P           | 300      | mW   |
| Junction temperature    | $T_j$       | 175      | °C   |
| Storage temperature     | $T_{stg}$   | -65~+175 | °C   |

### ●Electrical characteristics (Ta=25°C)

| Parameter                     | Symbol   | Min. | Typ. | Max. | Unit    | Conditions                         |
|-------------------------------|----------|------|------|------|---------|------------------------------------|
| Forward voltage               | $V_F$    | -    | -    | 1.5  | V       | $I_F=200mA$                        |
| Reverse current               | $I_R$    | -    | -    | 10   | $\mu A$ | $V_R=220V$                         |
| Capacitance between terminals | $C_T$    | -    | -    | 3    | pF      | $V_R=0V, f=1MHz$                   |
| Reverse recovery time         | $t_{rr}$ | -    | -    | 75   | ns      | $I_F=20mA, I_R=20mA, R_L=50\Omega$ |

# Diodes

## ●Electrical characteristic curves (Ta=25°C)

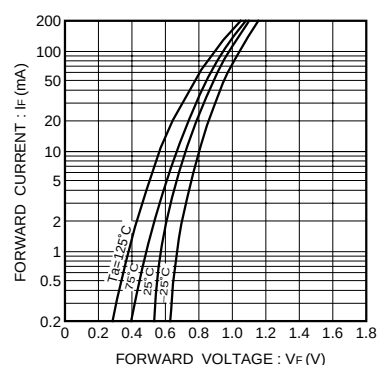


Fig. 1 Forward characteristics

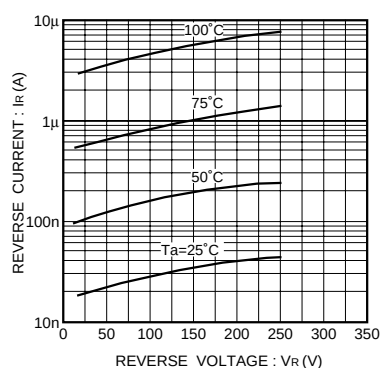


Fig. 2 Reverse characteristics

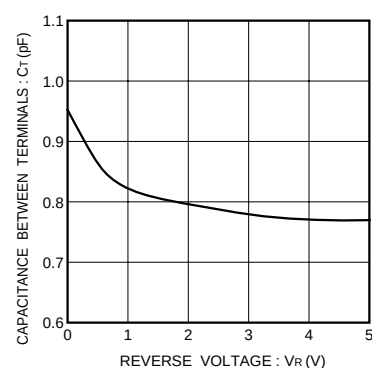


Fig. 3 Capacitance between terminals characteristics

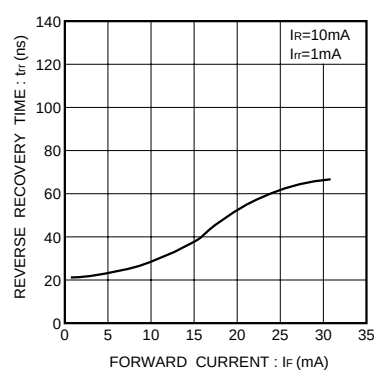


Fig. 4 Reverse recovery time characteristics

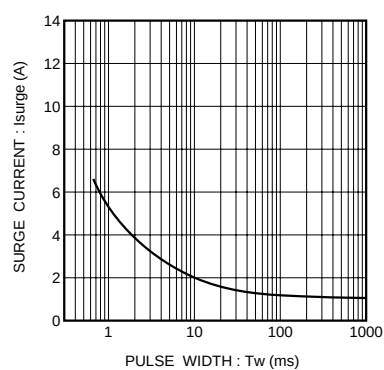


Fig. 5 Surge current characteristics

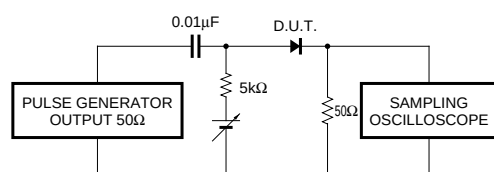


Fig. 6 Reverse recovery time ( $t_r$ ) measurement circuit