



# DD84RCLS

## Damper Diode for Ultrahigh-Definition Display Applications

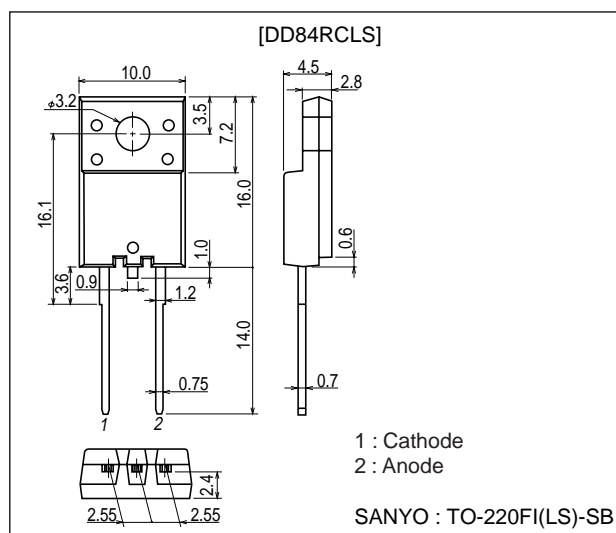
### Features

- High breakdown voltage( $V_{RRM}=1500V$ ).
- High reliability.
- One-point fixing type plastic molded package facilitating mounting and heat dissipation.
- Fast forward/reverse recovery time.

### Package Dimensions

unit : mm

1253A



### Specifications

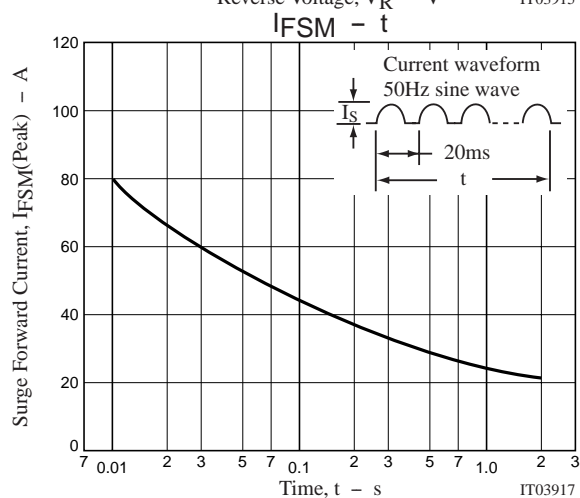
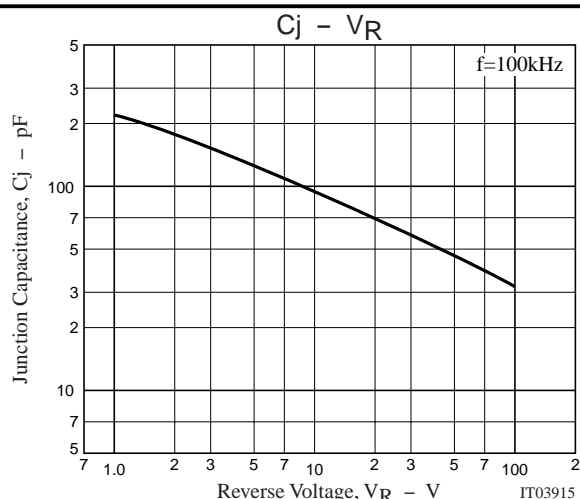
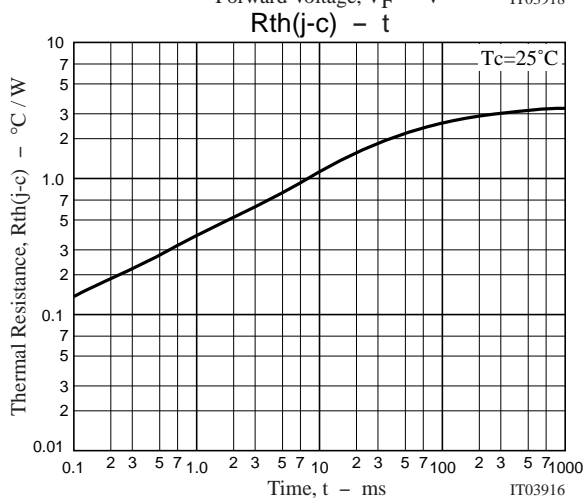
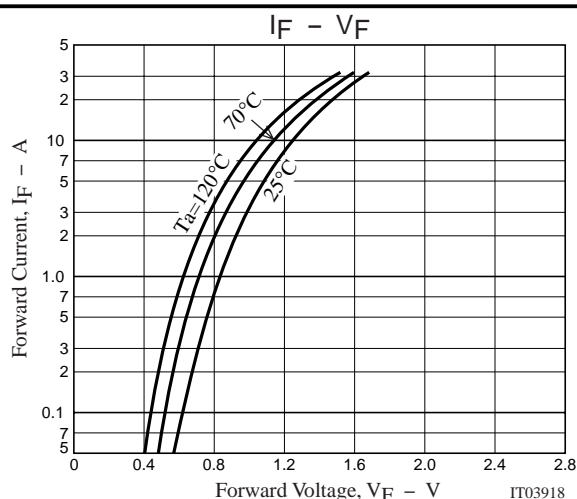
Absolute Maximum Ratings at  $T_a=25^\circ C$ 

| Parameter                           | Symbol    | Conditions                            | Ratings     | Unit       |
|-------------------------------------|-----------|---------------------------------------|-------------|------------|
| Repetitive Peak Reverse Voltage     | $V_{RRM}$ |                                       | 1500        | V          |
| Non-repetitive Peak Reverse Voltage | $V_{RSM}$ |                                       | 1500        | V          |
| Average Output Current              | $I_O$     |                                       | 8           | A          |
| Peak Output Current                 | $I_{OP}$  | $PW \leq 100\mu s$ , $duty \leq 50\%$ | 32          | A          |
| Surge Forward Current               | $I_{FSM}$ | Sine wave, 10ms                       | 80          | A          |
| Junction Temperature                | $T_j$     |                                       | 150         | $^\circ C$ |
| Storage Temperature                 | $T_{stg}$ |                                       | -55 to +150 | $^\circ C$ |

Electrical Characteristics at  $T_a=25^\circ C$ 

| Parameter             | Symbol        | Conditions                | Ratings |     |     | Unit           |
|-----------------------|---------------|---------------------------|---------|-----|-----|----------------|
|                       |               |                           | min     | typ | max |                |
| Reverse Voltage       | $V_R$         | $I_R=1mA$                 | 1500    |     |     | V              |
| Forward Voltage       | $V_F$         | $I_F=8A$                  |         |     | 1.8 | V              |
| Reverse Current       | $I_R$         | $V_R=1000V$               |         |     | 200 | $\mu A$        |
| Reverse Recovery Time | $t_{rr}$      | $I_F=100mA$ , $I_R=100mA$ |         |     | 1.5 | $\mu s$        |
| Forward Recovery Time | $t_{fr}$      | $I_F=100mA$               |         | 0.1 | 0.2 | $\mu s$        |
| Junction Capacitance  | $C_j$         | $V_R=10V$ , $f=100kHz$    |         | 90  |     | pF             |
| Thermal Resistance    | $R_{th(j-c)}$ | Junction-Case             |         |     | 3.4 | $^\circ C / W$ |

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