

**/ Descriptions**

TO-263

Schottky Diode in a TO-263 Plastic Package.

**/ Features**

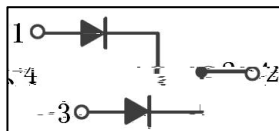
Low forward voltage drop, low power losses, High efficiency operation.

**/ Applications**

OR-ing

DC-DC

For use in high frequency inverters, switching power supplies, freewheeling diodes, OR-ing diode, dc-to-dc converters and reverse battery protection.

**/ Equivalent Circuit****/ Pinning**

PIN1 Anode

PIN 2 4 Cathode

PIN 3 Anode

**/ h<sub>FE</sub> Classifications & Marking**

See Marking Instructions.

/ Absolute Maximum Ratings( $T_a=25$  )

| Parameter                              | Symbol          | Rating   | Unit |
|----------------------------------------|-----------------|----------|------|
| Peak Repetitive Reverse Voltage        | $V_{RRM}$       | 100      | V    |
| Average forward rectified Current      | $I_F$           | 2X10     | A    |
| Non Repetitive Peak Surge Current      | $I_{FSM}$       | 150      | A    |
| Thermal Resistance Junction to Case    | $R_{\theta Jc}$ | 2.8      | /W   |
| Junction and Storage Temperature Range | $T_j$ $T_{stg}$ | -40~+150 |      |

/ Electrical Characteristics( $T_a=25$  )

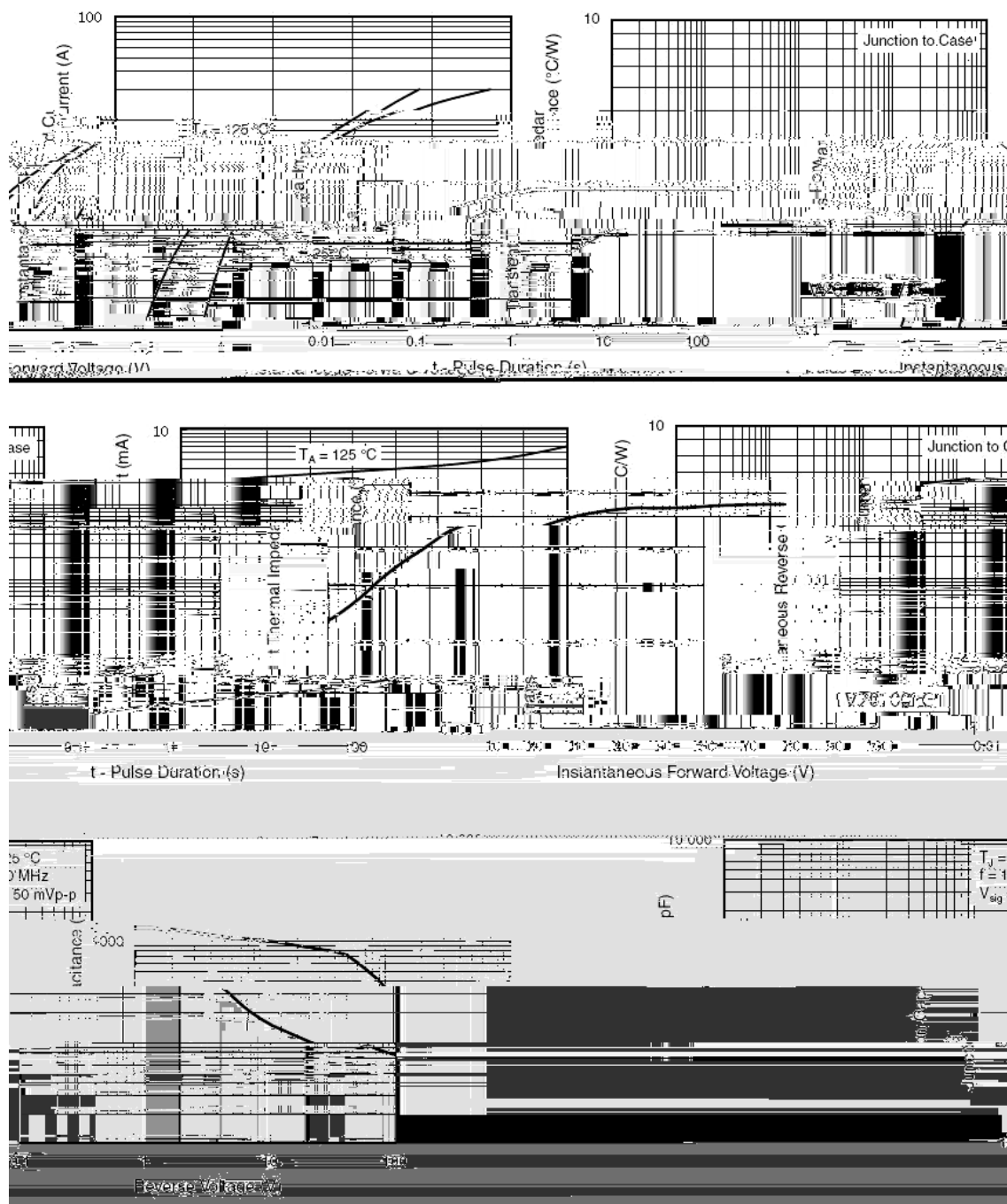
| Parameter                     | Symbol          | Test Conditions      | Min | Typ  | Max  | Unit    |
|-------------------------------|-----------------|----------------------|-----|------|------|---------|
| Reverse Voltage               | $V_{(BR)R}$     | $I_R=1mA$ $T_a=25$   | 100 |      |      | V       |
| Forward Voltage               | $V_{FM}$        | $I_F=5.0A$ $T_a=25$  |     | 0.55 | 0.65 | V       |
|                               |                 | $I_F=10A$ $T_a=25$   |     | 0.73 | 0.79 | V       |
|                               |                 | $I_F=5A$ $T_a=125$   |     | 0.50 | 0.60 | V       |
|                               |                 | $I_F=10A$ $T_a=125$  |     | 0.62 | 0.68 | V       |
| Instantaneous Reverse Current | $I_R$<br>Note 1 | $V_R=100V$ $T_a=25$  |     |      | 100  | $\mu A$ |
|                               |                 | $V_R=100V$ $T_a=125$ |     | 10   | 25   | mA      |

/Notes

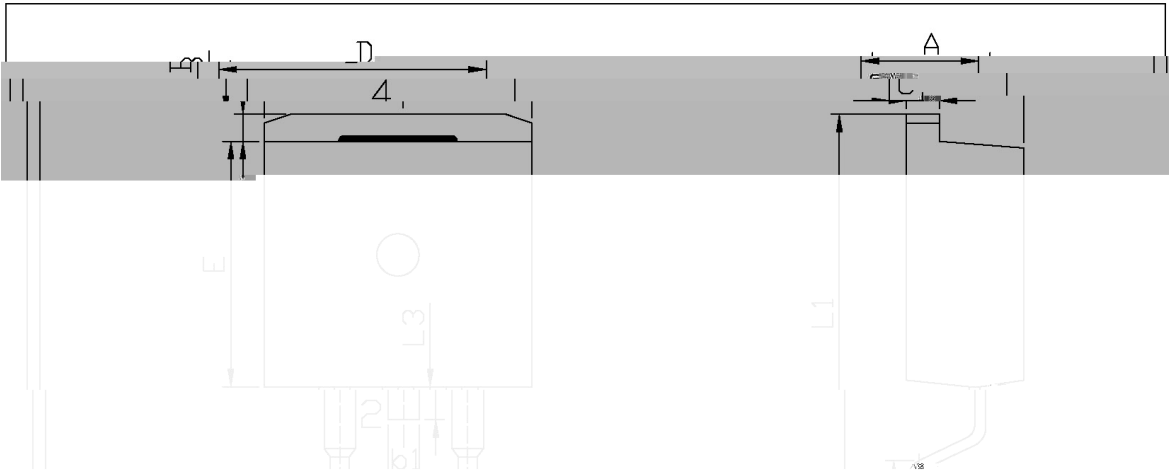
1. /Short duration pulse test used to minimize self-heating effect.

2. / Unless otherwise noted, values for the parameters of a single chip

/ Electrical Characteristic Curve

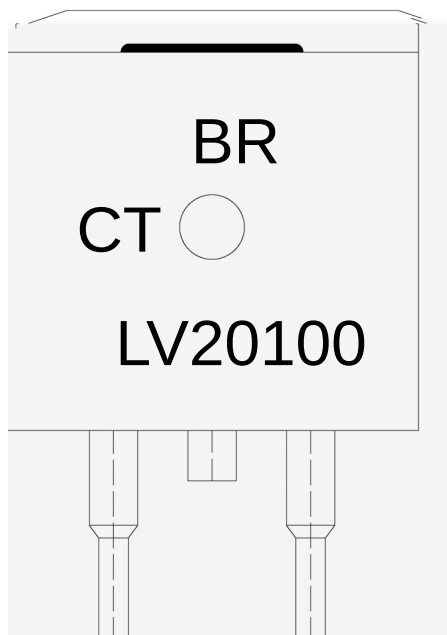


/ Package Dimensions



| MAX  |       | Min    |      | Max   |    | Min  |  |
|------|-------|--------|------|-------|----|------|--|
| a    |       | A      |      | B     |    | C    |  |
| 2.74 |       | 1.00   |      | 1.40  |    | 2.34 |  |
| 2.88 |       | 2.90   |      | 2.90  |    | 2.92 |  |
| 5.00 | 16.00 | b1     | 1.15 | 1.35  | L1 |      |  |
| 2.21 | 2.84  | b2     | 0.40 | 0.80  | L2 |      |  |
| 1.20 | 1.60  | C      | 1.20 | 1.40  | L3 |      |  |
|      |       | D      | 0.80 | 10.20 |    |      |  |
|      |       | ТП-263 |      |       |    |      |  |

/ Marking Instructions



BR

LV20100

CT:

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Note:

BR:

Company Code

LV20100

Product Type.

CT:

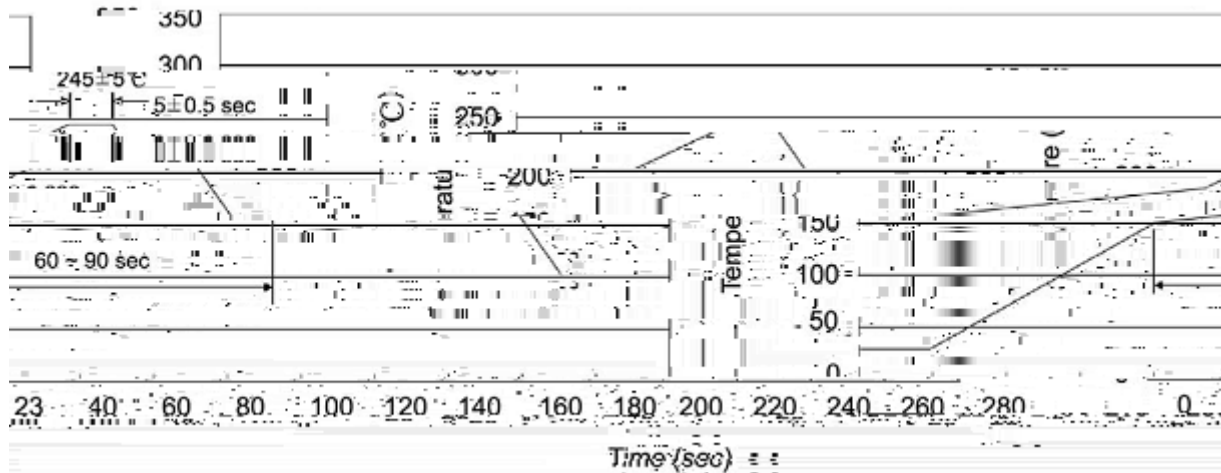
Internal Structure

\*\*\*\*:

Lot No. Code, code change with Lot No.



( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

1            25   150            60