## / Descriptions

TO-252

Ultrafast Recovery Diode in a TO-252 Plastic Package.

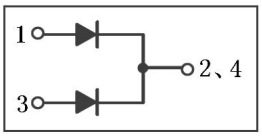
## / Features

Silicon epitaxial process to produce ultrafast recovery diode with low reverse leakage current and high reliability.

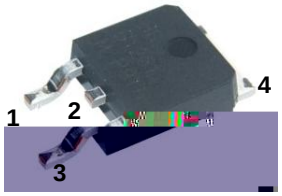
## / Applications

For high frequency, high voltage, high current rectifier diode, freewheeling diode.

## / Equivalent Circuit




## / Pinning




PIN1 Anode PIN 2 4 Cathode PIN 3 Anode

## / $h_{FE}$ Classifications & Marking

See Marking Instructions.

## / Absolute Maximum Ratings(Ta=25 )

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Peak Repetitive Reverse Voltage | $V_{RRM}$ | 200 | V |
| RMS Reverse Voltage | $V_{RMS}$ | 140 | V |
| DC Blocking Voltage | $V_{DC}$ | 200 | V |
| Average Forward Current | $I_F$ | 2 10 | A |
| Non Repetitive Peak Surge Current | $I_{FSM}$ | 120 | A |
| Thermal Resistance Junction to Case | $R_{Jc}$ | 2.8 | /W |
| Operating and Storage Temperature Range | $T_j$ $T_{stg}$ | -55 150 | |

## / Electrical Characteristics(Ta=25 )

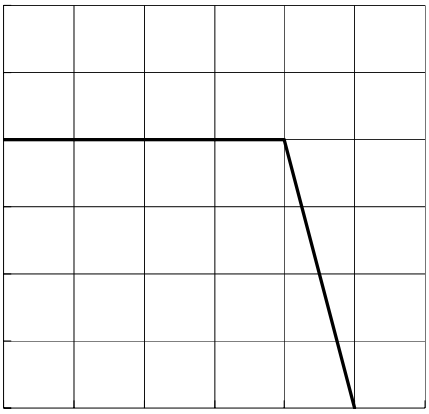
| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Forward Voltage | $V_F$ | $I_F$=2A Tc=25 | | 0.79 | | V |
| | | $I_F$=2A Tc=125 | | 0.65 | | V |
| | | $I_F$=10A Tc=25 | | 0.95 | 1.0 | V |
| | | $I_F$=10A Tc=125 | | 0.84 | 0.9 | V |
| Instantaneous Reverse Current | $I_R$ Note 1 | $V_R$=200V Ta=25 | | | 10 | A |
| | | $V_R$=200V Ta=125 | | | 150 | A |
| Reverse Recovery Time | $t_{rr}$ | $I_F$=0.5A $I_R$=1.0A $I_{RR}$=0.25A | | | 35 | ns |

/Notes

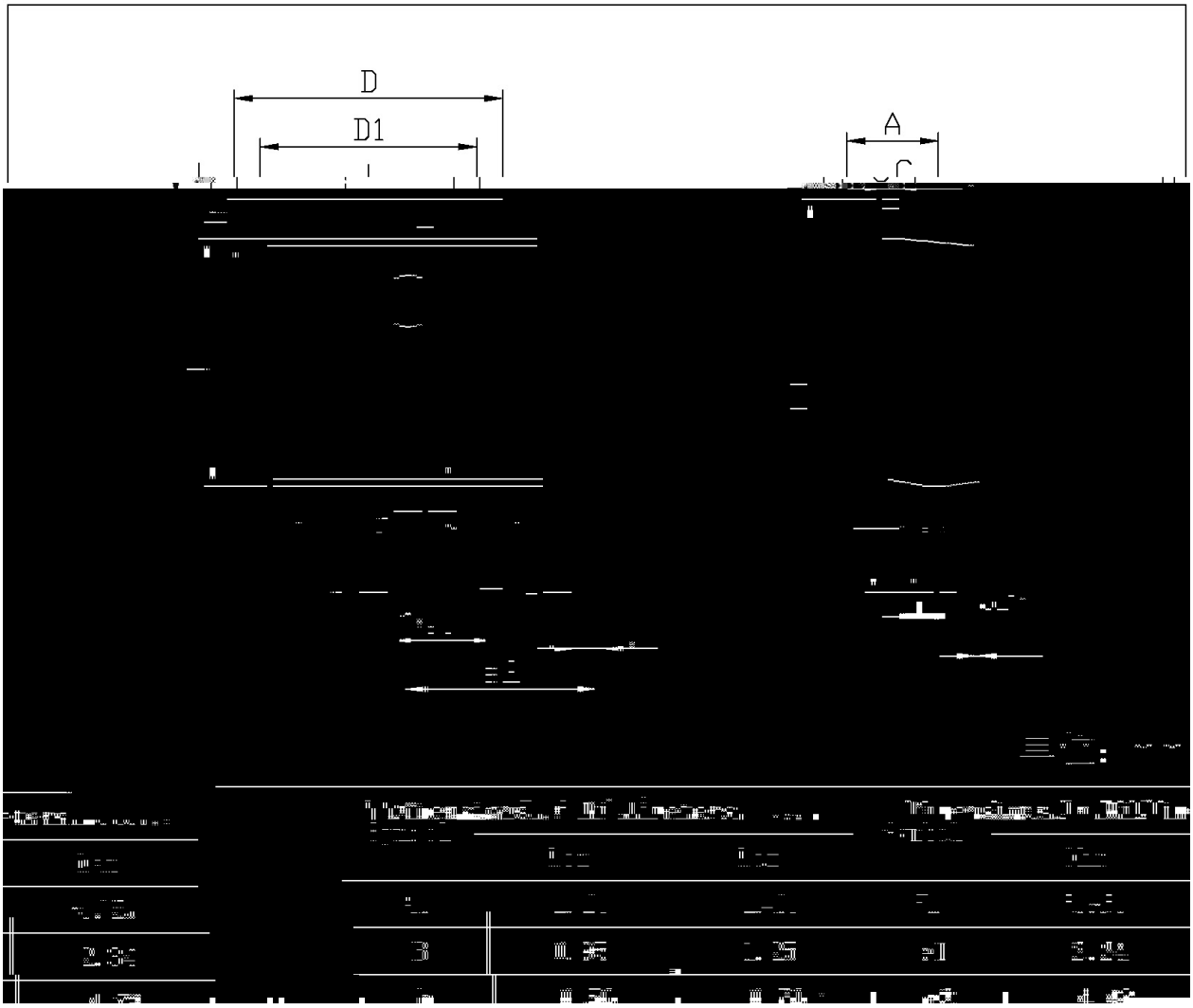
1. /Short duration pulse test used to minimize self-heating effect.

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

## / Electrical Characteristic Curve



## / Package Dimensions






## / Marking Instructions




BR

MURD2020

CT:

****

Note:

| | |
|---|---|
| BR: | Company Code |
| MURD2020 | Product Type. |
| CT: | Internal Structure |
| ****: | Lot No. Code, code change with Lot No. |