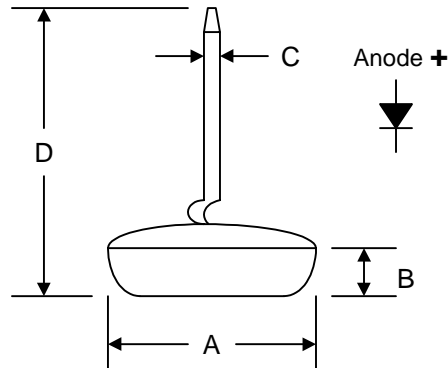


### Features

- Glass Passivated Die Construction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Low Forward
- C-Band Terminal Construction

### Mechanical Data

- Case: 8.4mm or 9.5mm Dish Type Press-Fit with Silicon Rubber Sealed on Top
- Terminals: Contact Areas Readily Solderable
- Polarity: Cathode to Case (Reverse Units Are Available Upon Request and Are Designated By A "R" Suffix, i.e. DD250R or DD250SR)
- Polarity: White Color Equals Standard, Black Color Equals Reverse Polarity
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 2**



| Dim | 8.4mm Dish     |      | 9.5mm Dish |      |
|-----|----------------|------|------------|------|
|     | Min            | Max  | Min        | Max  |
| A   | 8.25           | 8.45 | 9.30       | 9.70 |
| B   | 2.00           | 2.40 | 2.0        | 2.40 |
| C   | 1.50 Ø Typical |      |            |      |
| D   | 17.50          | —    | 17.50      | —    |

All Dimensions in mm

"S" Suffix Designates 8.4mm Dish  
No Suffix Designates 9.5mm Dish

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

| Characteristic  | Symbol          | DD250/<br>S | DD251/<br>S | DD252/<br>S | DD253/<br>S | DD254/<br>S | DD255/<br>S | DD256/<br>S | Unit               |
|---|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|
| Peak Repetitive Reverse Voltage   | $V_{RRM}$       |             |             |             |             |             |             |             | V                  |
| Working Peak Reverse Voltage  | $V_{RWM}$       | 50          | 100         | 200         | 300         | 400         | 500         | 600         |                    |
| DC Blocking Voltage   | $V_R$           |             |             |             |             |             |             |             |                    |
| RMS Reverse Voltage   | $V_{R(RMS)}$    | 35          | 70          | 140         | 210         | 280         | 350         | 420         | V                  |
| Average Rectified Output Current @ $T_C = 150^\circ\text{C}$  | $I_O$           | 25          |             |             |             |             |             |             | A                  |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | $I_{FSM}$       | 300         |             |             |             |             |             |             | A                  |
| Forward Voltage @ $I_F = 25\text{A}$  | $V_{FM}$        | 1.0         |             |             |             |             |             |             | V                  |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$<br>At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$           | $I_{RM}$        | 5.0<br>500  |             |             |             |             |             |             | $\mu\text{A}$      |
| Typical Junction Capacitance (Note 1)   | $C_j$           | 300         |             |             |             |             |             |             | pF                 |
| Typical Thermal Resistance (Note 2)   | $R_{\theta JC}$ | 1.0         |             |             |             |             |             |             | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range   | $T_J, T_{STG}$  | -65 to +175 |             |             |             |             |             |             | $^\circ\text{C}$   |

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
2. Thermal Resistance: Junction to case, single side cooled.

## ORDERING INFORMATION

| Product No. | Package Type         | Shipping Quantity |
|-------------|----------------------|-------------------|
| DD250       | 9.5mm Dish Press-Fit | 2000 Units/Box    |
| DD250S      | 8.4mm Dish Press-Fit | 2000 Units/Box    |
| DD251       | 9.5mm Dish Press-Fit | 2000 Units/Box    |
| DD251S      | 8.4mm Dish Press-Fit | 2000 Units/Box    |
| DD252       | 9.5mm Dish Press-Fit | 2000 Units/Box    |
| DD252S      | 8.4mm Dish Press-Fit | 2000 Units/Box    |
| DD253       | 9.5mm Dish Press-Fit | 2000 Units/Box    |
| DD253S      | 8.4mm Dish Press-Fit | 2000 Units/Box    |
| DD254       | 9.5mm Dish Press-Fit | 2000 Units/Box    |
| DD254S      | 8.4mm Dish Press-Fit | 2000 Units/Box    |
| DD255       | 9.5mm Dish Press-Fit | 2000 Units/Box    |
| DD255S      | 8.4mm Dish Press-Fit | 2000 Units/Box    |
| DD256       | 9.5mm Dish Press-Fit | 2000 Units/Box    |
| DD256S      | 8.4mm Dish Press-Fit | 2000 Units/Box    |

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, DD250-LF.**

Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

**WARNING:** DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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*We power your everyday.*