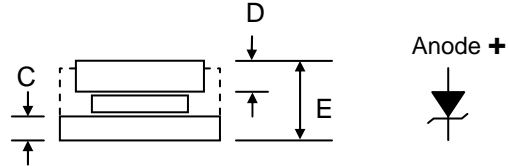


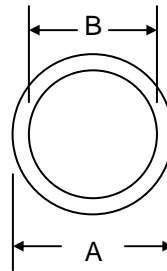
### Features

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Die Size 184 mil HEX



### Mechanical Data

- Case: Cell Diode Passivated with Silicon Rubber
- Terminal: Copper Disc with Ag Plated
- Polarity: Indicated by Large Disc On Cathode Side, Add "R" Suffix to Indicate Reverse Polarity, i.e. C3520R
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 2**



| C35                  |      |      |
|----------------------|------|------|
| Dim                  | Min  | Max  |
| A                    | —    | 6.40 |
| B                    | —    | 5.46 |
| C                    | 0.75 | —    |
| D                    | 1.0  | —    |
| E                    | —    | 2.2  |
| All Dimensions in mm |      |      |

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified


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

| Characteristic  | Symbol   | C3520       | C3524    | C3536    | Unit |
|---|--|-------------|----------|----------|------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                | V <sub>RRM</sub><br>V <sub>RWM</sub><br>V <sub>R</sub> | 16          | 20       | 32       | V    |
| Average Rectified Output Current @T <sub>C</sub> = 150°C  | I <sub>O</sub>   | 35          |          |          | A    |
| Breakdown Voltage Min.<br>Breakdown Voltage Max.  | V <sub>BR</sub>  | 20<br>26    | 24<br>32 | 36<br>42 | V    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave Superimposed on<br>Rated Load (JEDEC Method) | I <sub>FSM</sub>                                       | 400         |          |          | A    |
| Forward Voltage @I <sub>F</sub> = 80A   | V <sub>FM</sub>  | 1.08        |          |          | V    |
| Peak Reverse Current<br>At Rated DC Blocking Voltage @T <sub>A</sub> = 25°C   | I <sub>RM</sub>  | 200         |          |          | nA   |
| Typical Thermal Resistance Junction to Ambient  | R <sub>JA</sub>  | 1.4         |          |          | °C/W |
| Operating and Storage Temperature Range   | T <sub>J</sub> , T <sub>STG</sub>                      | -40 to +150 |          |          | °C   |

## ORDERING INFORMATION

| Product No. | Package Type     | Shipping Quantity |
|-------------|------------------|-------------------|
| C3520       | 6.4mm Cell Diode | 5000 Units/Bottle |
| C3524       | 6.4mm Cell Diode | 5000 Units/Bottle |
| C3536       | 6.4mm Cell Diode | 5000 Units/Bottle |

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, C3520-LF.**

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**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.*