

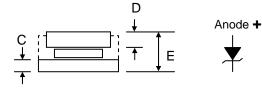
C5020, C5024, C5036

50A AVALANCHE AUTOMOTIVE CELL DIODE



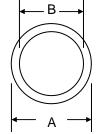
Features

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Die Size 220 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. C5020R
- Mounting Position: Any
- Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 2



| C50 | | | | | |
|----------------------|------|------|--|--|--|
| Dim | Min | Max | | | |
| Α | _ | 7.55 | | | |
| В | - | 6.55 | | | |
| С | 0.75 | — | | | |
| D | 1.0 | — | | | |
| Е | — | 2.2 | | | |
| All Dimensions in mm | | | | | |

Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

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

| Characteristic | | Symbol | C5020 | C5024 | C5036 | Unit |
|--|--|--------------------|-------------|----------|----------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | | Vrrm Vrwm Vr | 16 | 20 | 32 | V |
| Average Rectified Output Current | @T _c = 150°C | ю | 50 | | | А |
| Breakdown Voltage Min. Breakdown Voltage Max. | @I _R = 100mA @I _R = 100mA | Vbr | 20 26 | 24 32 | 36 42 | V |
| Non-Repetitive Peak Forward Surge 8.3ms Single Half Sine-Wave Superi Rated Load (JEDEC Method) | | IFSM | | 500 | | A |
| Forward Voltage | @I _F = 100A | Vfm | 1.08 | | V | |
| Peak Reverse Current At Rated DC Blocking Voltage | @T _A = 25°C | lгм | 200 | | nA | |
| Typical Thermal Resistance Junction | to Ambient | R ja | | 1.0 | | °C/W |
| Operating and Storage Temperature Range | | TJ, Tsтg | -40 to +150 | | °C | |



ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity | | |
|-------------|------------------|-------------------|--|--|
| C5020 | 7.6mm Cell Diode | 2000 Units/Bottle | | |
| C5024 | 7.6mm Cell Diode | 2000 Units/Bottle | | |
| C5036 | 7.6mm Cell Diode | 2000 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, C5020-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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