

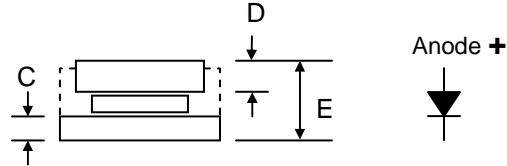
# C50A – C50K

50A AUTOMOTIVE CELL DIODE



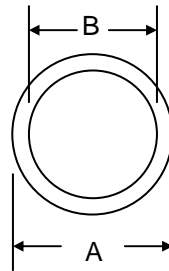
## Features

- 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. C50AR
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 2**



C50		
Dim	Min	Max
A	—	7.40
B	—	6.55
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	C50A	C50B	C50D	C50G	C50J	C50K	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	V
Average Rectified Output Current @T <sub>C</sub> = 150°C	I <sub>O</sub>	50						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	500						A
Forward Voltage @I <sub>F</sub> = 100A	V <sub>FM</sub>	1.08						V
Peak Reverse Current At Rated DC Blocking Voltage @T <sub>A</sub> = 25°C	I <sub>RM</sub>	3.0						μA
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	1.0						°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
C50A	7.2mm Cell Diode	2000 Units/Bottle
C50B	7.2mm Cell Diode	2000 Units/Bottle
C50D	7.2mm Cell Diode	2000 Units/Bottle
C50G	7.2mm Cell Diode	2000 Units/Bottle
C50J	7.2mm Cell Diode	2000 Units/Bottle
C50K	7.2mm 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, C50A-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.

**Won-Top Electronics Co., Ltd.**

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

**Phone:** 886-7-822-5408 or 886-7-822-5410

**Fax:** 886-7-822-5417

**Email:** sales@wontop.com

**Internet:** <http://www.wontop.com>

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