

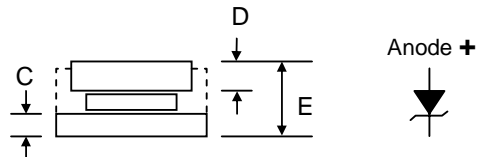
C3520 & C3524

35A AVALANCHE AUTOMOTIVE CELL DIODE



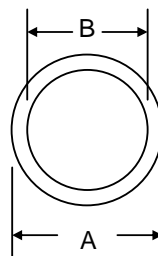
Features

- 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	—	6.30
B	—	5.46
C	0.75	—
D	1.0	—
E	—	2.2
All Dimensions in mm		

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	C3520	C3524	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	16	20	V
Average Rectified Output Current @ $T_C = 150^{\circ}\text{C}$	I_O	35		A
Breakdown Voltage Min. Breakdown Voltage Max.	@ $I_R = 100\text{mA}$ @ $I_R = 100\text{mA}$ V_{BR}	20 26	24 32	V
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	400		A
Forward Voltage @ $I_F = 80\text{A}$	V_{FM}	1.08		V
Peak Reverse Current At Rated DC Blocking Voltage @ $T_A = 25^{\circ}\text{C}$	I_{RM}	200		nA
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	1.4		$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-40 to +150		$^{\circ}\text{C}$

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
C3520	6.2mm Cell Diode	5000 Units/Bottle
C3524	6.2mm 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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