WON-TOP ELECTRONICS

HD5020 & HD5024

50A GLASS PASSIVATED AVALANCHE HITACHI TYPE PRESS-FIT DIODE

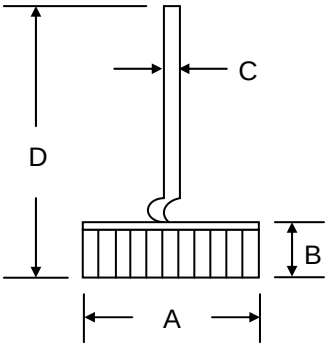
RoHS Pb

Features

- Glass Passivated Die Construction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical I_R less than 200nA
- C-Band Terminal Construction

Mechanical Data

- Case: 12mm Hitachi Type Press-Fit
- Terminals: Contact Areas Readily Solderable
- Polarity: Cathode to Case (Reverse Units Are Available Upon Request and Are Designated By A "R" Suffix, i.e. HD5020R or HD5024R)
- 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**



12mm Hitachi		
Dim	**Min**	**Max**
A	11.80	12.00
B	3.65	3.85
C	1.35	1.55
D (+)*	18.00	22.00
D (-)*	20.00	24.00
All Dimensions in mm		

(+)*: Standard Polarity
(-)*: Reverse Polarity

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

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

Characteristic	Symbol	HD5020	HD5024	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 = 120°C	I_O	50		A
Breakdown Voltage Min. @I_R = 100mA Breakdown Voltage Max. @I_R = 100mA	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}	500		A
Forward Voltage @I_F = 50A	V_{FM}	1.0		V
Peak Reverse Current At Rated DC Blocking Voltage @T_A = 25°C	I_{RM}	200		nA
Typical Junction Capacitance (Note 1)	C_J	300		pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.2		°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175		°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.

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
HD5020	12mm Hitachi Press-Fit	500 Units/Box
HD5024	12mm Hitachi Press-Fit	500 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, HD5020-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.

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