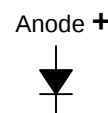
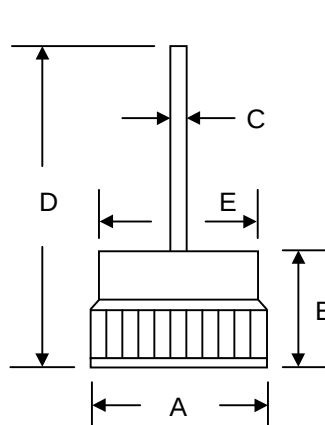


Features

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical I_R less than $5.0\mu A$

Mechanical Data

- Case: 13mm Motorola 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. MD5002R or MD5004R)
- Polarity: Red 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**



13mm Motorola		
Dim	Min	Max
A	12.80	13.20
B	7.70	8.10
C	1.25	1.31
D	25.00	—
E	11.10	11.50
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ C$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	MD5000	MD5001	MD5002	MD5003	MD5004	MD5005	MD5006	Unit
Peak Repetitive Reverse Voltage	V_{RRM}								
Working Peak Reverse Voltage	V_{RWM}	50	100	200	300	400	500	600	V
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	210	280	350	420	V
Average Rectified Output Current @ $T_C = 150^\circ C$	I_O	50							A
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 @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 100^\circ C$	I_{RM}	5.0 500							μA
Typical Junction Capacitance (Note 1)	C_j	400							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.0							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175							$^\circ C$

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.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
MD5000	13mm Motorola Press-Fit	100 Units/Box
MD5001	13mm Motorola Press-Fit	100 Units/Box
MD5002	13mm Motorola Press-Fit	100 Units/Box
MD5003	13mm Motorola Press-Fit	100 Units/Box
MD5004	13mm Motorola Press-Fit	100 Units/Box
MD5005	13mm Motorola Press-Fit	100 Units/Box
MD5006	13mm Motorola Press-Fit	100 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, MD5000-LF.**

Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

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.