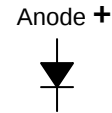
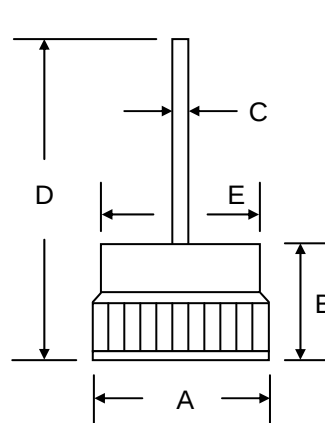


Features

- 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. MD7002R or MD7004R)
- 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	MD7000	MD7001	MD7002	MD7003	MD7004	MD7005	MD7006	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	300	400	500	600	V
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	70							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	600							A
Forward Voltage @ $I_F = 70A$	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)	$R_{\theta JC}$	0.98							$^\circ C/W$
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
MD7000	13mm Motorola Press-Fit	180 Units/Box
MD7001	13mm Motorola Press-Fit	180 Units/Box
MD7002	13mm Motorola Press-Fit	180 Units/Box
MD7003	13mm Motorola Press-Fit	180 Units/Box
MD7004	13mm Motorola Press-Fit	180 Units/Box
MD7005	13mm Motorola Press-Fit	180 Units/Box
MD7006	13mm Motorola Press-Fit	180 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, MD7000-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 806, 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>

We power your everyday.