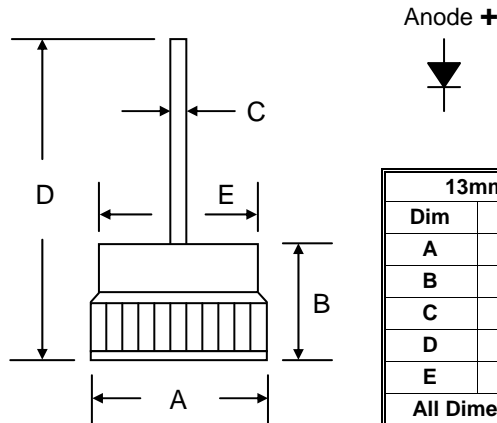


Features

- Glass Passivated Die Construction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical IR less than 5.0 μ 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. MD50160R)
- 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°C unless otherwise specified

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


Characteristic	Symbol	MD50160	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	1600	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	1120	V
Average Rectified Output Current @T _C = 150°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}	1.2	V
Peak Reverse Current @T _A = 25°C	I _{RM}	5.0	μ A
At Rated DC Blocking Voltage @T _A = 100°C		500	
Typical Junction Capacitance (Note 1)	C _J	400	pF
Typical Thermal Resistance (Note 2)	R _{JC}	1.0	°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.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
MD50160	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, MD50160-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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