



POWER MODULES

VS-40MT160P-P, VS-70MT160P-P, and VS-100MT160P-P

Three-Phase Bridge Power Modules in MTP PressFit Package Lower Production Costs and Increase Reliability



KEY BENEFITS

- Maximum output current from 45 A to 100 A
- Low profile MTP PressFit package (17 mm profile)
- Direct mounting to heatsinks
- 3500 V_{RMS} insulation voltage
- Low forward voltage
- Low junction to case thermal resistance
- Designed and qualified for industrial-level applications
- UL-approved file E78996

APPLICATIONS

- Power conversion machines, welding equipment, UPS, SMPS, motor drives, and general purpose and heavy-duty applications

RESOURCES

- Datasheet: VS-40MT160P-P, VS-70MT160P-P, VS-100MT160P-P - www.vishay.com/ppg?94870
- For technical questions contact:
DiodesAmerica@vishay.com, DiodesAsia@vishay.com, DiodesEurope@vishay.com
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912





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MTP PressFit

FEATURES

- Low V_F
- Low profile package
- Direct mounting to heatsink
- PressFit pins technology
- Low junction to case thermal resistance
- 3500 V_{RMS} insulation voltage
- Designed and qualified for industrial level
- PressFit pins locking technology
PATENT(S): www.vishay.com/patents
- UL approved file E78996 
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RoHS
COMPLIANT

PRIMARY CHARACTERISTICS	
I_o	45 A to 100 A
V_{RRM}	1600 V
Package	MTP PressFit
Circuit configuration	Three-phase bridge

APPLICATIONS

- Power conversion machines
- Welding
- UPS
- SMPS
- Motor drives
- General purpose and heavy duty application

DESCRIPTION

The new MTP module is easy to use thanks to solderless method for contacting PressFit pins to the PCB. The low profile package has been specifically conceived to maximize space saving and optimize the electrical layout of the application specific power supplies.

MAJOR RATINGS AND CHARACTERISTICS					
SYMBOL	CHARACTERISTICS	VALUES 40MT	VALUES 70MT	VALUES 100MT	UNITS
I_o		45	75	100	A
	T_c	100	80	80	°C
I_{FSM}	50 Hz	270	380	450	A
	60 Hz	280	398	470	
I^2t	50 Hz	365	724	1013	A ² s
	60 Hz	325	660	920	
$I^2\sqrt{t}$		3650	7240	10 130	A ² √s
V_{RRM}		1600			V
T_{Stg}	Range	- 40 to + 150			°C
T_J		- 40 to + 150			

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PATENT(S): www.vishay.com/patents

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