

1. Features

- Green and Power Saving Available
- Temperature-Compensated for Operation over Full Rated Operating
- Adjustable Hold on Current and Hold on Switch Timing
- Higher Output Efficiency
- Fast Turn-on Response
- RoHS Compliant, 100% Pb & Halogen Free
- IP65



2. Description

The PD (PWM) series is a small POWER SAVING module that improves the service life and performance of the solenoid valve. This product is designed with a power-saving circuit to reduce the coil temperature so that the valve can operate normally when opening and closing. The PD (PWM) series is a pulse width modulation circuit with higher efficiency. For different coils and solenoid valves, the PD (PWM) series can provide different power-saving effects and adjust parameters to suit customer applications.

3. Applications:

- Solenoid Valve
- Valve Terminal
- Electric locks
- Switchgear
- Relay
- Contactor



4. Technical Data

- 12 or 24VDC(-10%/+10%) Operating Vcc Range
- Pulse Output Current : 1,500mA max.
- Holding Output Current : 0 ~1,200mA
- Power Saving Ratio Setting : adjustable
- Power Saving Covert Time 175~999mS Adj.(+/-10%)
- Low EMI & Magnet Loss , Thermal Reduce
- Operating temperature -20C ~ 60C

5. Electrical Parameter Table

MIT D type (24V , 0~60 degree C)

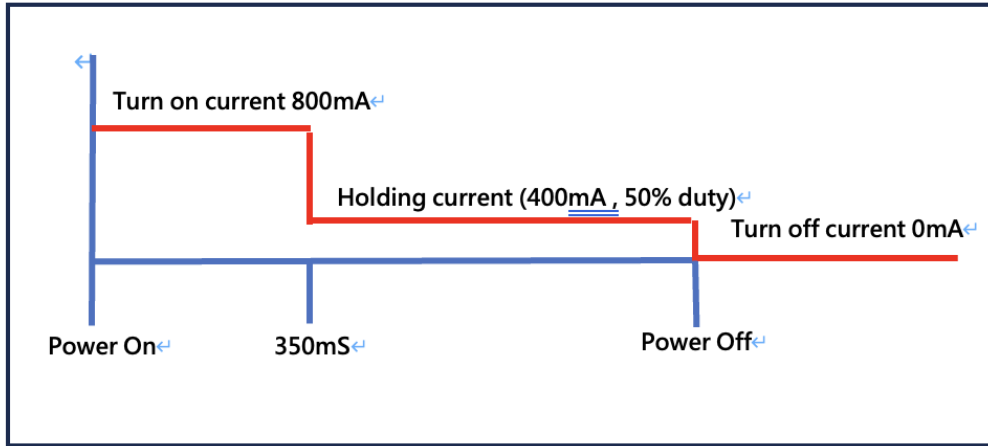
parameter		minimum	maximum	unit
Power Supply On		21.6	26.4	V
Maximum pulse current		0	1.5	A
Maximum cont. current		0	1.2	A
Allowed coil resistance		full range		Ohm
pull in time		175	999	mS
holder power	5W	4500	5500	mW
	6W	5400	6600	
	7W	6300	7700	
	8W	8200	8800	
Operating Frequency		500		Hz
Duty Cycle		0~80%		%
ESD protection		4,000		V
Operating Temperature		-20	60	°C

Note1 . If your application is out of the specifications listed above. We can then customize the driver to meet your most demanding needs.

Note2. build in fuse on board to be safety issue upon surge power occur.

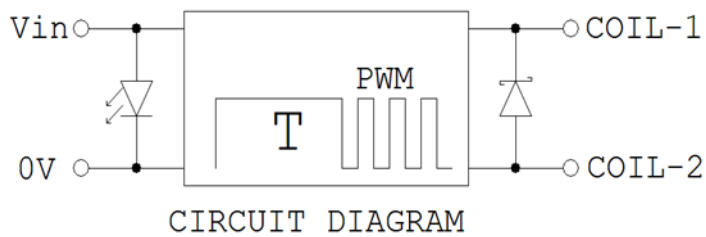
Note3. VR customize version can adjust holding current from 25% ~ 75% power saving : CW to increase duty(current up) , CCW to reduce duty(current down)

6. Major Power Saving Function



Topology Example(50% duty)

7. Major Circuit Diagram



Surge Protection , LED x 1(power on)



8. Ordering Information

PD-VV-WW-SS-PWM-IPXXX

Model: PD series

VV: Input Voltage range [unit:V]

VV value	24
Vcc min [V]	21.6
Vcc max [V]	26.4

WW: Duty cycle [%]

WW value	30	40	50
Duty Cycle [%]	30	40	50

SS: Translate Time (second stage time)[unit:ms]

SS value	35	50	99
Delay time	350ms	500ms	999ms

PWM Type

XXX : IP Level Definition



Notice

Specifications of the products displayed herein are subject to change without notice. MIT or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Purchasers are solely responsible for the choice, selection, and use of MIT products and MIT assumes no liability for application assistance or the design of Purchasers' products.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in MIT' s terms and conditions of sale for such products, MIT assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of MIT products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify MIT for any damages resulting from such improper use or sale.

Copy Rights and Disclaimer

This document may not be reproduced or duplicated, in any form, in whole or in part without prior written consent of MIT . Copyrights © 2025, MIT-Magnetic Integrated Technology Incorporated. MIT-Magnetic Integrated Technology reserves the right to make changes to the information published in this document at anytime without notice. MIT' s products are limited for use in industrial and normal commercial applications. MIT' s products are not to be used in any device or system, including but not limited to medical life support equipment and system.