

Featuring built-in protection circuits necessary for compact power source charger circuitry, while also conserving power during standby!

High-Performance IPD for Battery Chargers MIP2F× Series

■ Overview

MIP2F× series is a high-performance IPD designed for 20W battery chargers. It features built-in protection circuits necessary for compact power source charger circuitry. This allows a significant reduction in externally connected parts.

It provides PWM control when a normal load is applied and intermittent control with low load. This results in greater efficiency for very low to maximum loads, while also conserving power during standby.

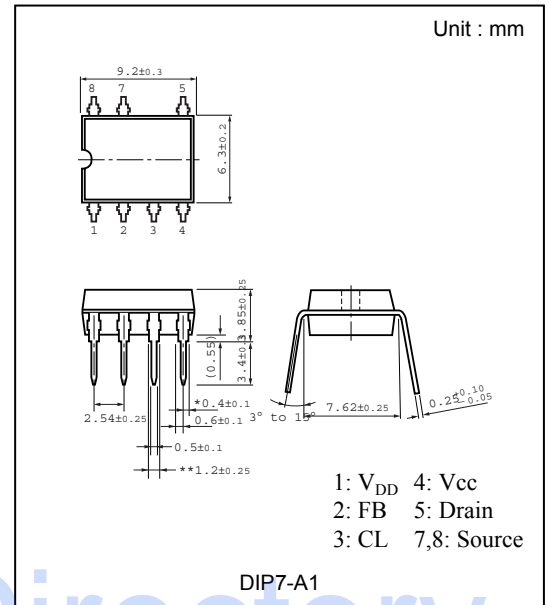
■ Feature

- Lowering the liability of input voltage
- Significantly reduced power consumption with no load
20mW at 100VAC (existing lines:25mW)
20mW at 240VAC (existing lines:30mW)
- Built-in charge protection circuit
Built-in overcurrent, overheating, load shorting and overvoltage protection circuits

■ Applications

Chargers (for cellular phones, etc.), AC adapter

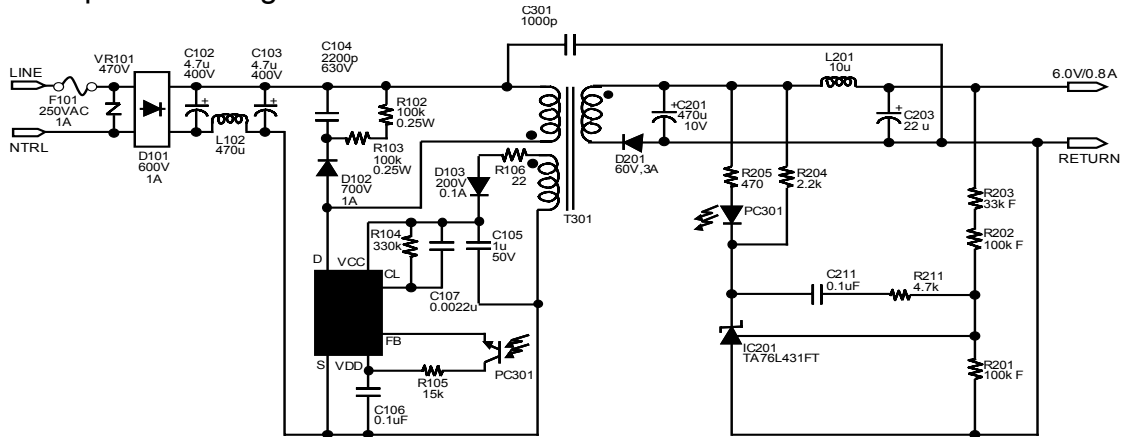
■ Lineup



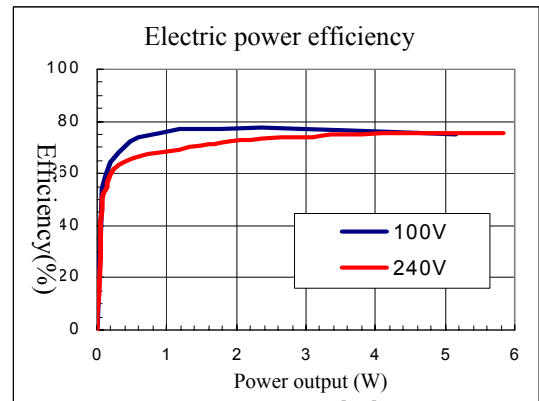
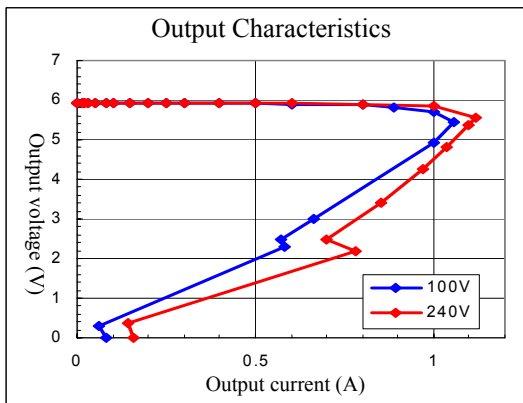
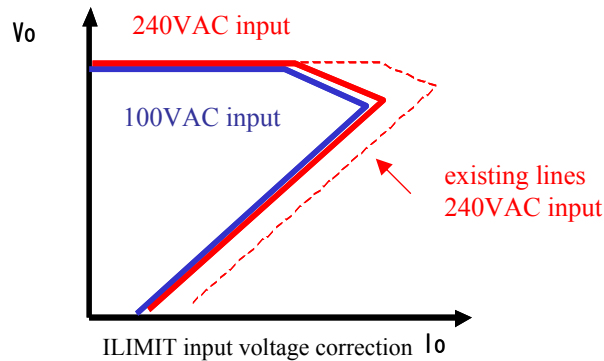
Type No.	Output*	Characteristic			
		VDSS	ILIMIT	Ron	fosc
MIP2F10MS	Up to 4 W	700 V	0.25 A	31 Ω	100 kHz
MIP2F20MS	Up to 7 W		0.35 A	20 Ω	
MIP2F30MS	Up to 10 W		0.50 A	10 Ω	
MIP2F40MS	Up to 15 W		0.70 A	7 Ω	
MIP2F50MS	Up to 20 W		1.00 A	3 Ω	

* : The electric power mentioned above depends on the transformer specification and ambient conditions. The information should be used only as a guide.

■ The example of a charger circuit



■ Electrical Characteristic



■ Precautions on the Sales of IPDs

- 1) The sale and/or the export of IPD products to any customer or customers located in any country other than Japan is expressly prohibited by the Agreement made and executed by and between Power Integrations, Inc. and Matsushita Electric Industrial Co., Ltd.
- 2) IPD products purchased from Matsushita Electric Industrial Co., Ltd., or its authorized agents, hereinafter referred to as MATSUSHITA, shall be used only for production purposes by those parties who have duly purchased IPD products. Those who have purchased IPD products shall not use such IPD products in unmodified form for re-sale, loan, or sample shipment for evaluation purposes to any other parties.
- 3) If a party who has duly purchased IPD products subcontracts its production to any other parties, including its subsidiaries or any other third parties inside and/or out of Japan, and the IPD products are consigned to such subcontracting parties thereat, such party is obligated to monitor and control the quantity of IPD products to prevent any of the aforementioned re-sale, loan or sample shipments from taking place.
- 4) In the event that any actual or threatened breach or violation of any of the above mentioned 1, 2, or 3, has occurred or is about to occur, MATSUSHITA will hold all shipments of IPD products and may request the party alleged to be responsible for such occurrence for necessary.

Parts No.	Able to supply	Disable to supply	Application
MIP2F□ □	<ul style="list-style-type: none"> • Domestic Japanese companies • Japanese companies in Asia (50% or more owned) 	<ul style="list-style-type: none"> • European and American companies • Local Asian companies • Other local companies 	For power supply