Panasonic

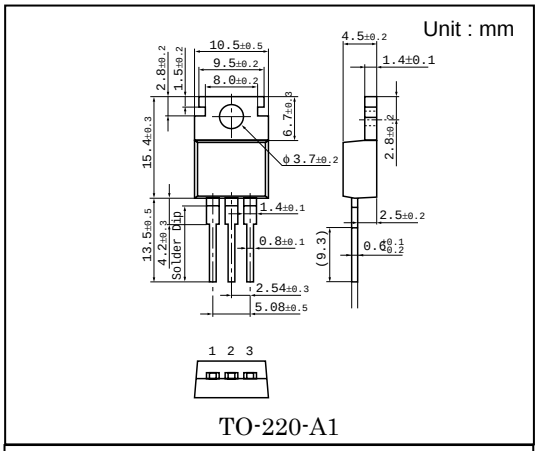
Product News

Drastic energy saving at standby and high efficiency is realized!

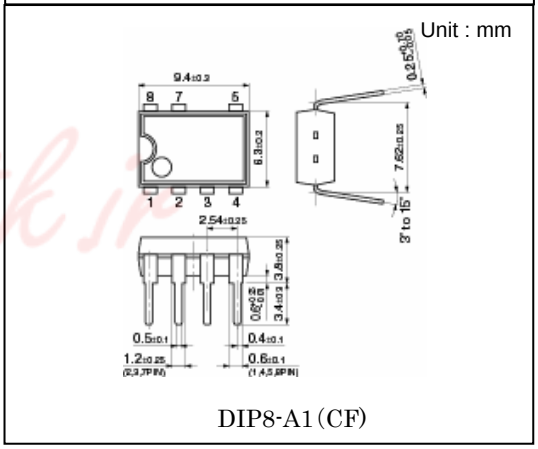
Three terminal IPDs of super power saving at standby

■ Overview

Three terminal IPDs of super power saving at standby respond to worldwide inputs and realized higher efficiency than existing three terminal IPDs（MIP2E*D series）. The power consumption at standby can be made into half at the maximum.
As replacement from existing IPDs is possible, more energy saving is also possible without change of a substrate design.
These IPDs are optimum for the power supply to 60W class.



TO-220-A1



DIP8-A1（CF）

■ Feature

- Respond to worldwide inputs
- The power consumption at light load is cut down more.
  50% reduction at the maximum than existing IPDs(MIP2E*Dseries)
  (Less than 0.1W of power consumption is attained at standby.)
- Reducing external parts and high reliability are realized by buit-in protection function.
- Soft start included

■ Applications

Adaptors, Power supply circuits

■ Characteristic

Power consumption at standby.

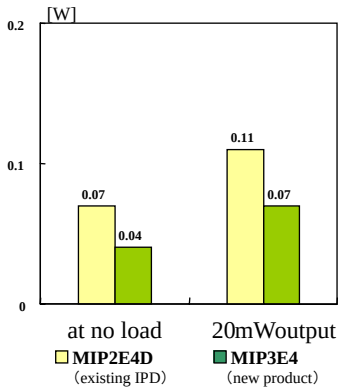
···· Comparison with existing IPDs (MIP2E*D series)

Comparison with existing IPDs

at no load

● at 100V input ➡ 43% down

	Power consumption [W]	
	MIP2E4D	MIP3E4
at no load	0.07	0.04
20mW output	0.11	0.07
20W output	24.3 (Efficiency 82.4%)	24.3 (Efficiency 82.4%)

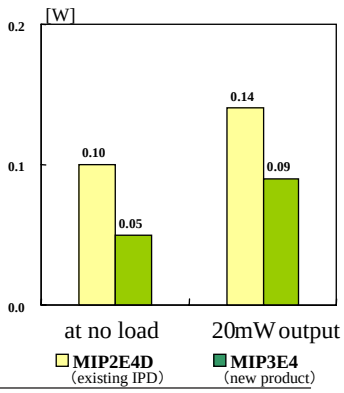


Comparison with existing IPDs

at no load

● at 264V input ➡ 50% down

	Power consumption [W]	
	MIP2E4D	MIP3E4
at no load	0.10	0.05
20mW output	0.14	0.09
20Woutput	23.8 (Efficiency 83.9%)	23.8 (Efficiency 84.1%)



Products and specifications are subject to change without notice.
Please ask for the latest Product Standards to guarantee the satisfaction of your product requirements.

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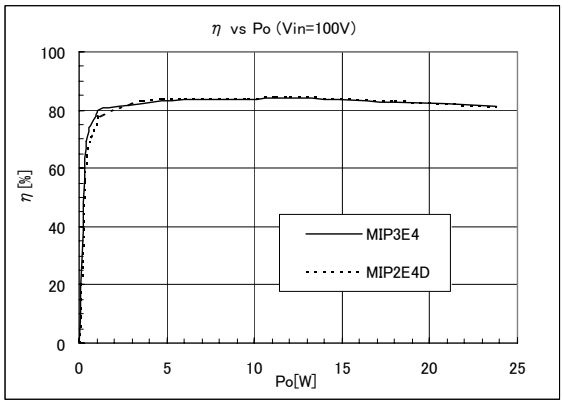
■ Lineup

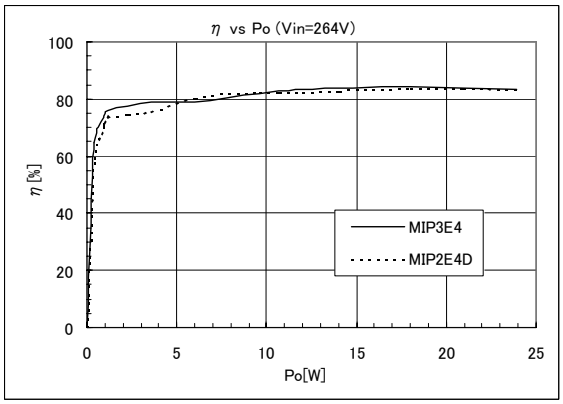
Part number	Output power	Characteristics				Package
		V_{DSS}	I_{LIMIT}	R_{ON}	fosc	
MIP3E3	10 to 20W	700V	0.80A	8Ω	100 kHz	TO-220-A1
MIP3E3S	10 to 25W		1.00A	6Ω		DIP8-A1(CF)
MIP3E4	15 to 30W		1.35A	5.2Ω		TO-220-A1
MIP3E5	20 to 40W		1.80A	4Ω		
MIP3E7	40 to 60W		2.70A	2.6Ω		

■ Characteristics

Comparison of efficiency

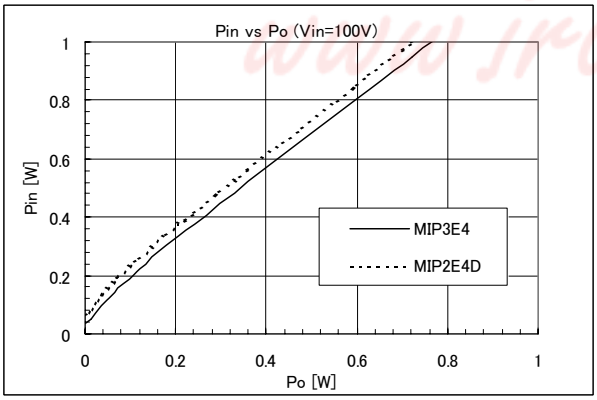


Vin=100V

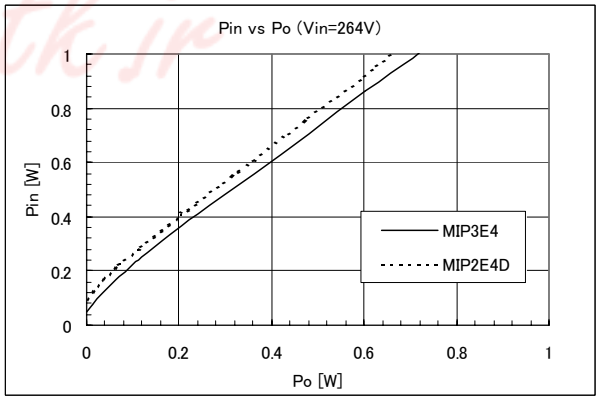


Vin=264V

Comparison of power consumption at light load



Vin=100V



Vin=264V

■ The example of an application circuit