



The BP5074 series AC/DC converters

with low power consumption during standby.



(7mW – a decrease of at least 75% over previous units)

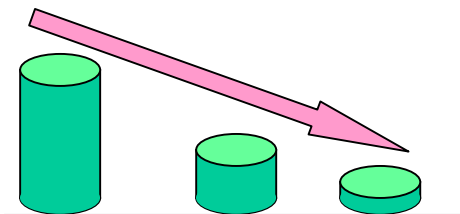


High efficiency AC/DC converters (BP5074 series) have been developed in a microcontroller application). In addition, the only external with a power consumption of **7mW** during standby (1/4 that of conventional products) and less than **50mW** during operation at light loads (e.g. 2mA components required are input/output capacitors and a rectifier diode. The entire series is **Lead-free and RoHS compliant**.

● Features

1. Standby power consumption = **7mW**

Input AC 100V Output DC12V, 0mA



Transformer Type	BP5034 Conventional	BP5074
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2. Simple configuration **with internal coil**.

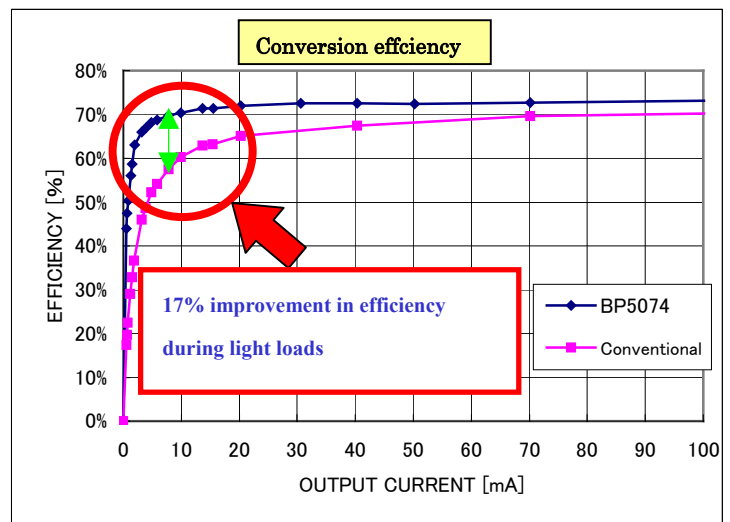
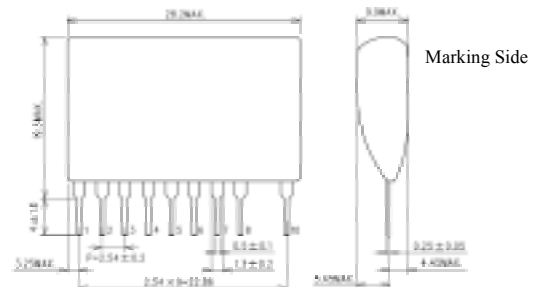
The only external components required are **input/output capacitors and a rectifier diode**.

3. Greater efficiency during lighter loads.

● Dimensions

BP5074

(UNIT : mm)



*Contact ROHM for more information on these products.

● Absolute Maximum Rating

Ta=25°C

Parameter	Symbol	Limits	Unit	Note
Input voltage	Vin	170	V	DC
Operating temperature range	Topr	-25 to 80	°C	Use within the limits of the derating
Storage temperature range	Tstg	-25 to 105	°C	
Maximum Surface Temperature	Tsmax	100	°C	Including intrinsic heat generation
Maximum Output Current	Iopeak	100	mA	Please note that the peak current value will vary depending on ambient temperature– refer to the derating curve.

● Electrical Characteristics

Unless otherwise noted, Ta=25°C, Vin=141V, Io=50mA

Parameter	Symbol	Standard			Unit	Conditions
		MIN.	TYP.	MAX.		
Input voltage	Vin	113	141	170	V	DC(80~120VAC)
Output voltage	Vo	11.5	12.5	13.5	V	
Output current	Io	0	-	100	mA	Note:
Line regulation	Vr	-	0.02	0.10	V	Vin=113~170V
Load regulation	Vl	-	0.05	0.15	V	Io=0~50mA
Output ripple voltage	Vp	-	0.05	0.15	Vp-p	
Conversion efficiency	η	68	73	-	%	Io=100mA

Note: the maximum output current will vary depending on ambient temperature – refer to the derating curve.

● Application circuit

