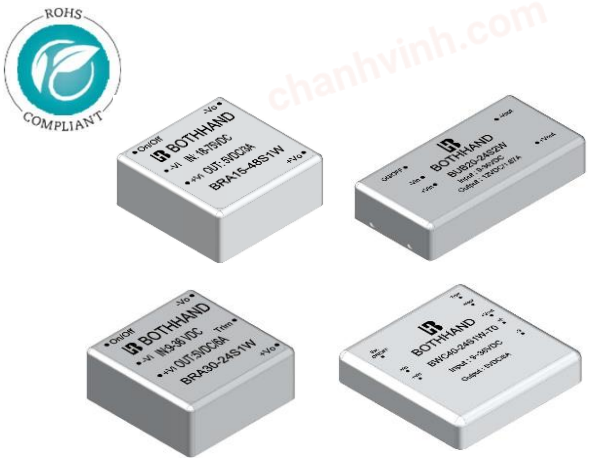
chanhvinh.com

DC-DC Converters (1.5kVdc Isolation) 15W to 60W DIP

BRAxx/BUAxx/BUBxx/BUCxx/BWCxx- series

Pulse
a YAGEO company



- *Input Voltage Range: 9-16V, 9-36V, 18-36V and 18-75V*
- *Output Voltage Range: 5V to 24V, Single and Dual (+/-Vout)*
- *Power Level: 15W to 60W*
- *Isolation: 1.5kVdc*
- *Efficiency : up to 90% , no heatsinks required*
- *Operating Temperature Range: -40°C to +85°C*
- *Additional Features:*
  - *IEC/EN 62368-1 Approved*
  - *Low Ripple and Noise,*
  - *Output Short Circuit protection*
  - *Remote On/Off control, Thermal Shut-Down*

Electrical Specification @ 25°C (For BUA15 Op: -40°C to +71°C)

Model Number	Input Voltage Range	Output Voltage (V)	Output Current (mA)		Input Current (mA)		Eff .(%)	Capacitive Load, max. (uF)
			Min. Load	Full. Load	No Load	Full Load		
BUA15-24S1L	18~36V Nominal:24Vdc	5.1	95	3000	6	768	83	10000
BUA15-24S2L		12	10	1250	10	727	86	1700
BUA15-24D3L		±15	0	±500	36	727	86	220

Electrical Specification @ 25°C (For BRA15 Op: -40°C to +85°C)

Model Number	Input Voltage Range	Output Voltage (V)	Output Current (mA)		Input Current (mA)		Eff .(%)	max. (uF)
			Min. Load	Full. Load	No Load	Full Load		
BRA15-24S1W	9~36V Nominal:24Vdc	5	0	3000	55	710	88	6000
BRA15-24S2W		12	44	1300	56	747	87	2000
BRA15-48S1W	18~75V Nominal:48Vdc	5	0	3000	24	351	89	6000

Electrical Specification @ 25°C (For BRA20 Op: -40°C to +85°C)

Model Number	Input Voltage Range	Output Voltage (V)	Output Current (mA)		Input Current (mA)		Eff .(%)	Capacitive Load, max. (uF)
			Min. Load	Full. Load	No Load	Full Load		
BRA20-48S2W	18~75V Nominal:48V	12	0	1670	38	464	90	3300

Electrical Specification @ 25°C (For BUB20 Op: -40°C to +85°C)

Model Number	Input Voltage Range	Output Voltage (V)	Output Current (mA)		Input Current (mA)		Eff .(%)	Capacitive Load, max. (uF)
			Min. Load	Full. Load	No Load	Full Load		
BUB20-24S2W	9~36V Nominal:24V	12	53	1670	23	960	87	3360

chanhvinh.com

DC-DC Converters (1.5kVdc Isolation) 15W to 60W DIP

BRAxx/BUAxx/BUBxx/BUCxx/BWCxx- series

Pulse a YAGEO company

Electrical Specification @ 25°C (For BRA30 Op: -40°C to +85°C)								
Model Number	Input Voltage Range	Output Voltage (V)	Output Current (mA)		Input Current (mA)		Eff .(%)	Capacitive Load, max. (uF)
			Min. Load	Full. Load	No Load	Full Load		
BRA30-24S1W	9~36V Nominal:24V	5	0	6000	10	1420	88	10200

Electrical Specification @ 25°C (For BUC30 Op: -40°C to +85°C)								
Model Number	Input Voltage Range	Output Voltage (V)	Output Current (mA)		Input Current (mA)		Eff .(%)	Capacitive Load, max. (uF)
			Min. Load	Full. Load	No Load	Full Load		
BUC30-12S1	9~18V Nominal:12V	5.1	0	6000	150	3000	85	33000
BUC30-24S2	18~36V Nominal:24V	12	50	2500	85	1389	90	4700
BUC30-24D2		±12	±50	±1250	50	1389	90	2200

Electrical Specification @ 25°C (For BWC40 Op: -40°C to +85°C)								
Model Number	Input Voltage Range	Output Voltage (V)	Output Current (mA)		Input Current (mA)		Eff .(%)	Capacitive Load, max. (uF)
			Min. Load	Full. Load	No Load	Full Load		
BWC40-24S1W-T0	9~36V Nominal:24V	5	0	8000	60	1873	89	4700
BWC40-24S2W-T0		12	0	3350	20	1925	87	1200
BWC40-24S5W-T0		24	0	1670	20	1898	88	133

Electrical Specification @ 25°C (For BWC60 Op: -40°C to +85°C)								
Model Number	Input Voltage Range	Output Voltage (V)	Output Current (mA)		Input Current (mA)		Eff .(%)	Capacitive Load, max. (uF)
			Min. Load	Full. Load	No Load	Full Load		
BWC60-24S2T1	18~36V Nominal:24V	12	0	5000	40	2778	90	2200
BWC60-24S3T1		15	0	4000	40	2778	90	1000

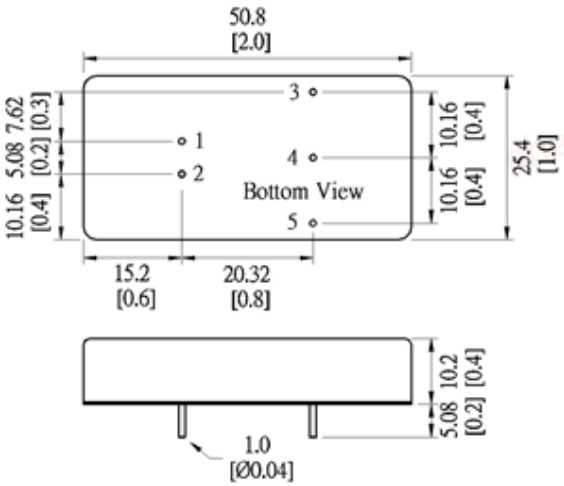
Process and Materials

1. Storage Temperature: -55°C to +125°C
2. Compliance to J-STD:
   A. J-STD-002: Solderability of Dipping at 255~260°C
   B. J-STD-020: Moisture Sensitive Level 1
3. All parts are packaged in tubes - see pages 5 and 6 for details
4. For full electrical characteristics, curves and applications, please refer to the detailed specification sheets available on request
5. Lead Frame: Cooper Alloy
   Underplated: Half Hard Ductile Nickel 40-118" (1.0 -3.0um)
   Over plated: 100% Tin electro-deposited per 240~400u"Min(6~10um)
   Finish: Matte finish 100% Tin solder

chanhvinh.com

Mechanical

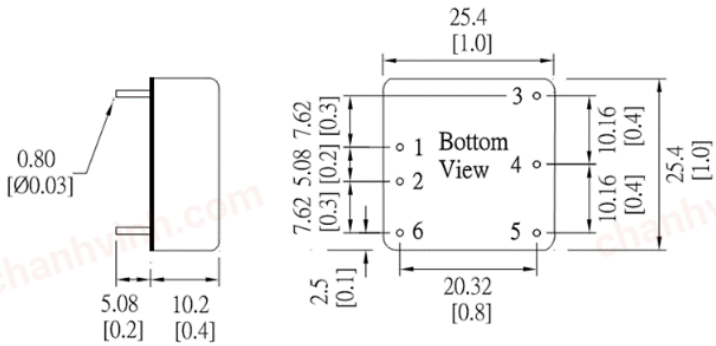
BUA15L



	BUA15-XXXXL	
PIN	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin	Common
5	-Vout	-Vout

Unit: mm (inch for reference only)
Pin Section tolerances +/-0.1
General tolerances +/-0.5(

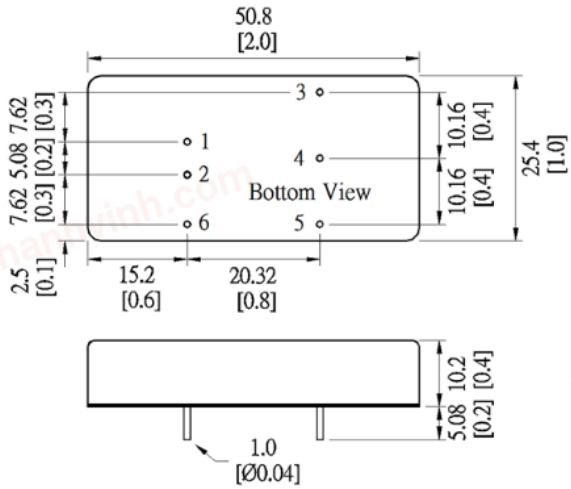
BRA15W/BRA15W-R1/BRA20W



	BRA15/20xxxxW/-R1
PIN	Single
1	+Vin
2	-Vin
3	+Vout
4	Trim
5	-Vout
6	Remote On/Off (optional)

Unit: mm (inch for reference only)
Pin Section tolerances +/-0.1
General tolerances +/-0.5(

BUB20W

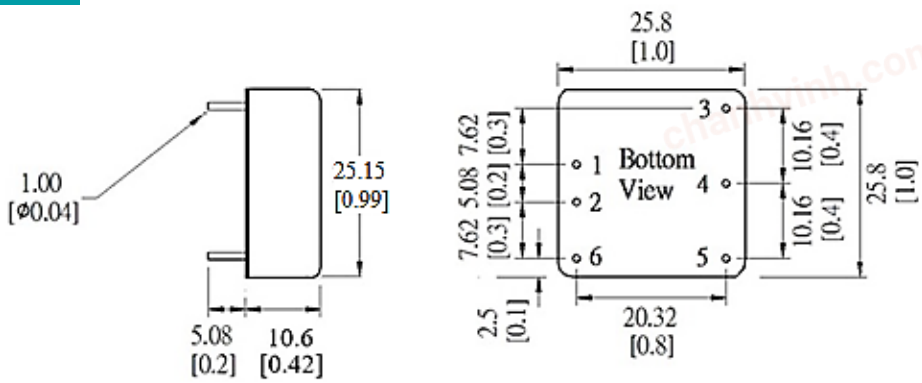


	BUB20-xxxxW
PIN	Single
1	+Vin
2	-Vin
3	+Vout
4	Trim
5	-Vout
6	Remote On/Off (optional)

Unit: mm (inch for reference only)
Pin Section tolerances +/-0.1
General tolerances +/-0.5(

chanhvinh.com

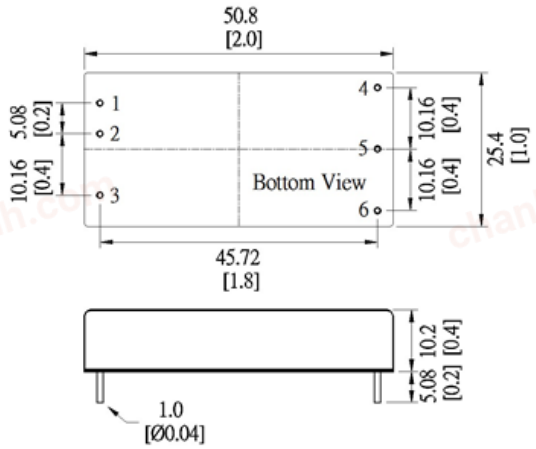
BRA30W



	BRA30-xxxxW
PIN	Single
1	+Vin
2	-Vin
3	+Vout
4	Trim
5	-Vout
6	Remote On/Off (optional)

Unit: mm (inch for reference only)
Pin Section tolerances +/-0.1
General tolerances +/-0.5(

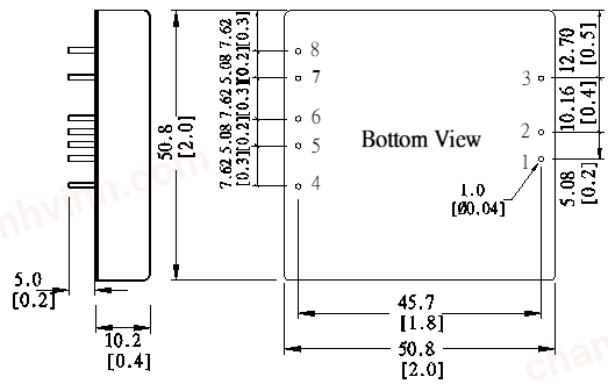
BUC30W



	BUC30xxxxW	
PIN	Single	Dual
1	+Vin	+Vout
2	-Vin	-Vin
3	Remote On/Off	
4	+Vout	+Vout
5	-Vout	Common
6	Trim	-Vout

Unit: mm (inch for reference only)
Pin Section tolerances +/-0.1
General tolerances +/-0.5(

BWC40W-T0/BWC60T1

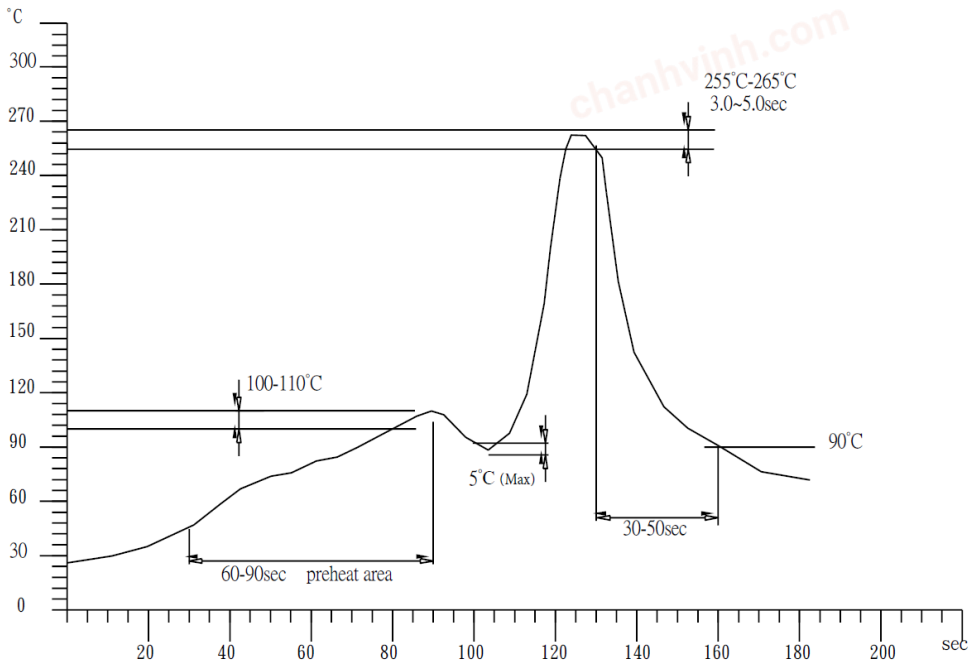


	BWC40/60-xxxx/W-T0/T1
PIN	Single
1	+Vin
2	-Vin
3	Remote On/Off
4	-Sense
5	-Sense
6	+Vout
7	-Vout
8	Trim

Unit: mm (inch for reference only)
Pin Section tolerances +/-0.1
General tolerances +/-0.5(

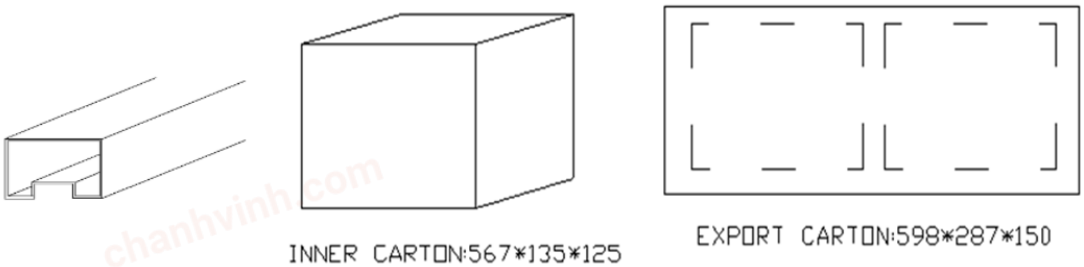
chanhvinh.com

Wave Soldering Temperature Curve



Carton Package

BRA15W/BRA15W-R1/BRA20W/ BRA30W



TUBE=19PCS
INNER CARTON=20 TUBE=20*19=380PCS
EXPORT CARTON=2 INNER CARTON=2*380=760PCS

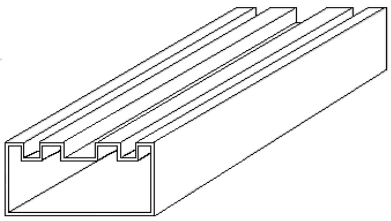
chanhvinh.com

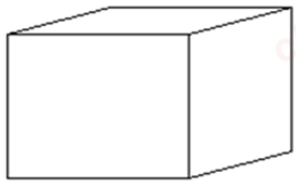
DC-DC Converters (1.5kVdc Isolation) 15W to 60W DIP

BRAxx/BUAxx/BUBxx/BUCxx/BWCxx- series

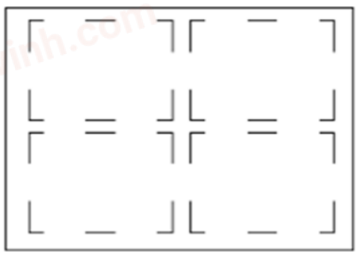
Carton Package

BUA15L/BUB20W/BUC30





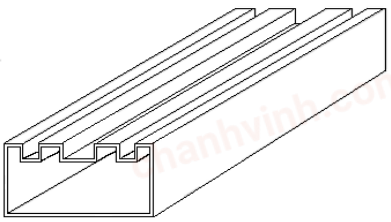
INNER CARTON:388*158.5*115

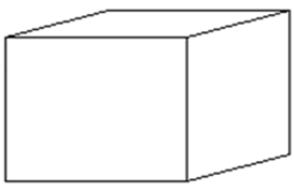


EXPORT CARTON:405*334*263

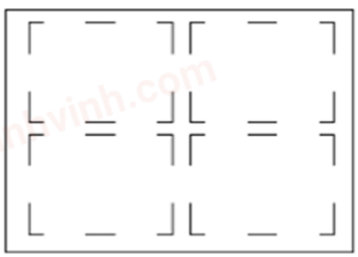
TUBE=12PCS
INNER CARTON=10 TUBE=10*12=120PCS
EXPORT CARTON=4 INNER CARTON=4*120=480PCS

BWC40W/BWC60





INNER CARTON:388*158.5*115



EXPORT CARTON:405*334*263

TUBE=6PCS
INNER CARTON=10 TUBE=10*6=60PCS
EXPORT CARTON=4 INNER CARTON=4*60=240PCS

For More Information:
Americas - prodinfo_network_americas@yageo.com | **Europe -** prodinfo_network_emea@yageo.com | **Asia -** prodinfo_network_asia@yageo.com

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2023. Pulse Electronics, Inc. All rights reserved.