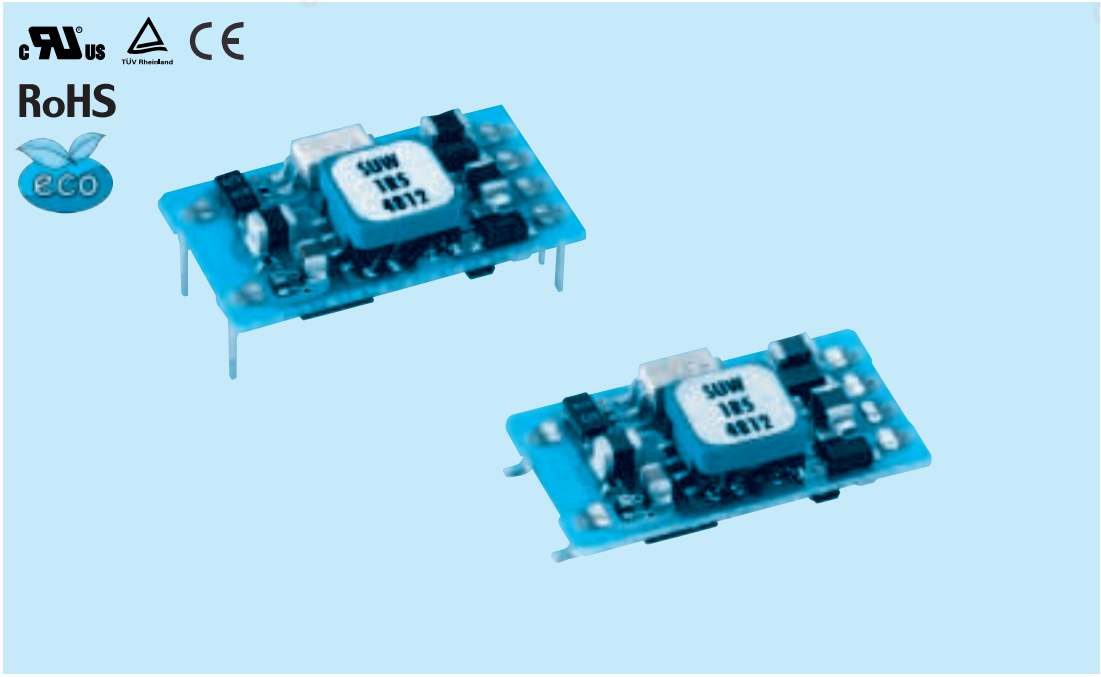
chanhvinh.com

COSEL DC-DC Converters PCB Mount type

SUW1R5

Ordering information

SU	W	1R5	12	12	B	P
①	②	③	④	⑤	⑥	⑦



①Series name
②Dual output
③Output wattage
④Input voltage
⑤Output voltage
⑥Mounting type
B :SMD
C :DIP
⑦Packing form
Blank:Plastic cover
P :Tray (SMD type)

MODEL		SUW1R50512	SUW1R50515	SUW1R51212	SUW1R51215	SUW1R52412	SUW1R52415	SUW1R54812	SUW1R54815
MAX OUTPUT WATTAGE[W]		1.56	1.5	1.56	1.5	1.56	1.5	1.56	1.5
DC OUTPUT	VOLTAGE[V] ＊1	±12 or +24	±15 or +30	±12 or +24	±15 or +30	±12 or +24	±15 or +30	±12 or +24	±15 or +30
	CURRENT[A]	0.065	0.05	0.065	0.05	0.065	0.05	0.065	0.05

SPECIFICATIONS

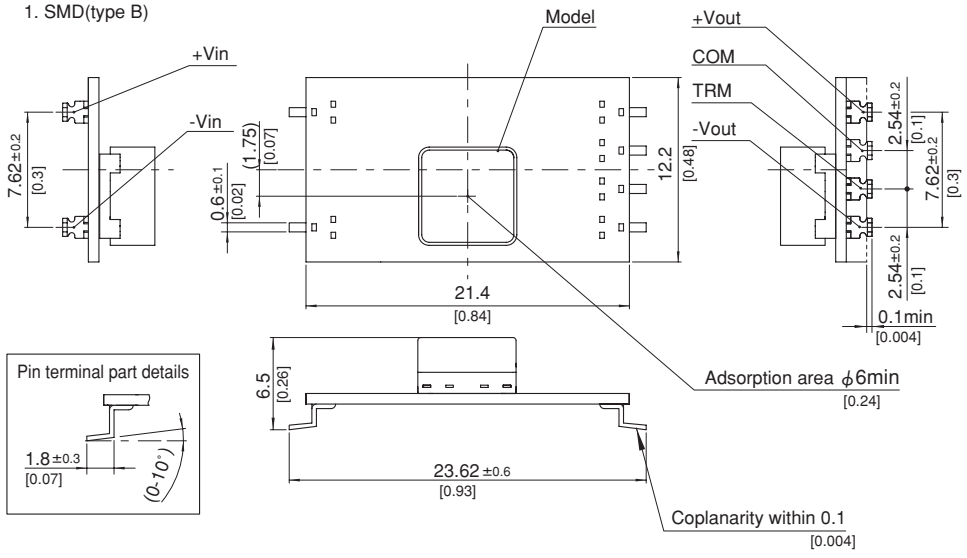
	MODEL		SUW1R50512	SUW1R50515	SUW1R51212	SUW1R51215	SUW1R52412	SUW1R52415	SUW1R54812	SUW1R54815
INPUT	VOLTAGE[V]		DC4.5 - 9		DC9 - 18		DC18 - 36		DC36 - 76	
	CURRENT[A]	＊2	0.433typ	0.417typ	0.173typ	0.167typ	0.087typ	0.083typ	0.043typ	0.042typ
	EFFICIENCY[%]	＊2	72typ	72typ	75typ	75typ	75typ	75typ	75typ	75typ
OUTPUT	VOLTAGE[V]		±12(+24)	±15(+30)	±12(+24)	±15(+30)	±12(+24)	±15(+30)	±12(+24)	±15(+30)
	CURRENT[A]		0.065	0.05	0.065	0.05	0.065	0.05	0.065	0.05
	LINE REGULATION[mV]		60max	75max	60max	75max	60max	75max	60max	75max
	LOAD REGULATION[mV]		600max	750max	600max	750max	600max	750max	600max	750max
	RIPPLE[mVp-p]	-20 to +55℃ ＊3	120max	120max	120max	120max	120max	120max	120max	120max
		-40 to -20℃ ＊3	150max	150max	150max	150max	150max	150max	150max	150max
	RIPPLE NOISE[mVp-p]	-20 to +55℃ ＊3	150max	150max	150max	150max	150max	150max	150max	150max
		-40 to -20℃ ＊3	200max	200max	200max	200max	200max	200max	200max	200max
	TEMPERATURE REGULATION[mV]	-20 to +55℃	150max	180max	150max	180max	150max	180max	150max	180max
		-40 to +55℃	240max	290max	240max	290max	240max	290max	240max	290max
	DRIFT[mV]	＊4	50max	60max	50max	60max	50max	60max	50max	60max
	START-UP TIME[ms]		20max (Minimum input, Io=100%)							
	OUTPUT VOLTAGE ADJUSTMENT RANGE		Fixed (TRM pin open) ±5% adjustable by external VR							
	OUTPUT VOLTAGE SETTING[V] (±5%)		11.40 - 12.60	14.25 - 15.75	11.40 - 12.60	14.25 - 15.75	11.40 - 12.60	14.25 - 15.75	11.40 - 12.60	14.25 - 15.75
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically							
ISOLATION	INPUT-OUTPUT		AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-40 to +85℃, 20 - 95%RH (Non condensing) (Required Derating), 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE		-40 to +100℃, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max							
	VIBRATION		10 - 55Hz, 98.0m/s^2 (10G), 3minutes period, 60minutes each along X, Y and Z axis							
	IMPACT		490.3m/s^2 (50G), 11ms, once each along X, Y and Z axis							
SAFETY	AGENCY APPROVALS		UL60950-1, C-UL, EN60950-1							
OTHERS	CASE SIZE/WEIGHT		21.4×6.5×12.2mm [0.84×0.26×0.48 inches] (W×H×D) / 2g max							
	COOLING METHOD		Convection/Forced air							

＊1 Output pins can be connected in series to make a 24V/30V output.
＊2 Rated input 5V, 12V, 24V or 48V DC Io=100%
＊3 Ripple and Ripple Noise is measured by using measuring board with capacitor with in 25mm from output pin terminals.
＊4 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃.
＊ Parallel operation with other model is not possible.

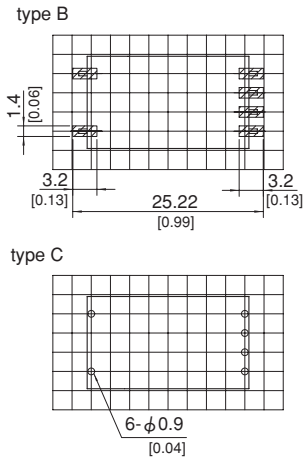
chanhvinh.com

External view

1. SMD(type B)

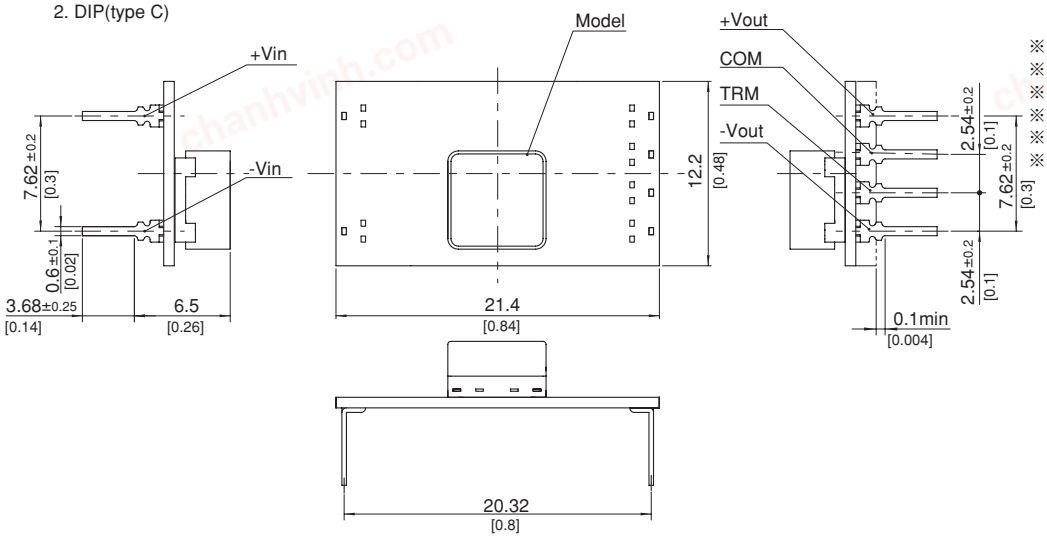


Recommended Pad and Hole dia.
(TOP VIEW)



Unit : 0.1inch
Dimensions in mm, [ ]=inches

2. DIP(type C)



※ Tolerance ±0.5 [±0.02]
※ Dimensions in mm, [ ]=inches
※ Pin terminal thickness : 0.3±0.1 [0.012]
※ Pin terminal material : Copper alloy
※ Plating treatment of terminal : Lead free plating
※ Weight : 2g max

chanhvinh.com

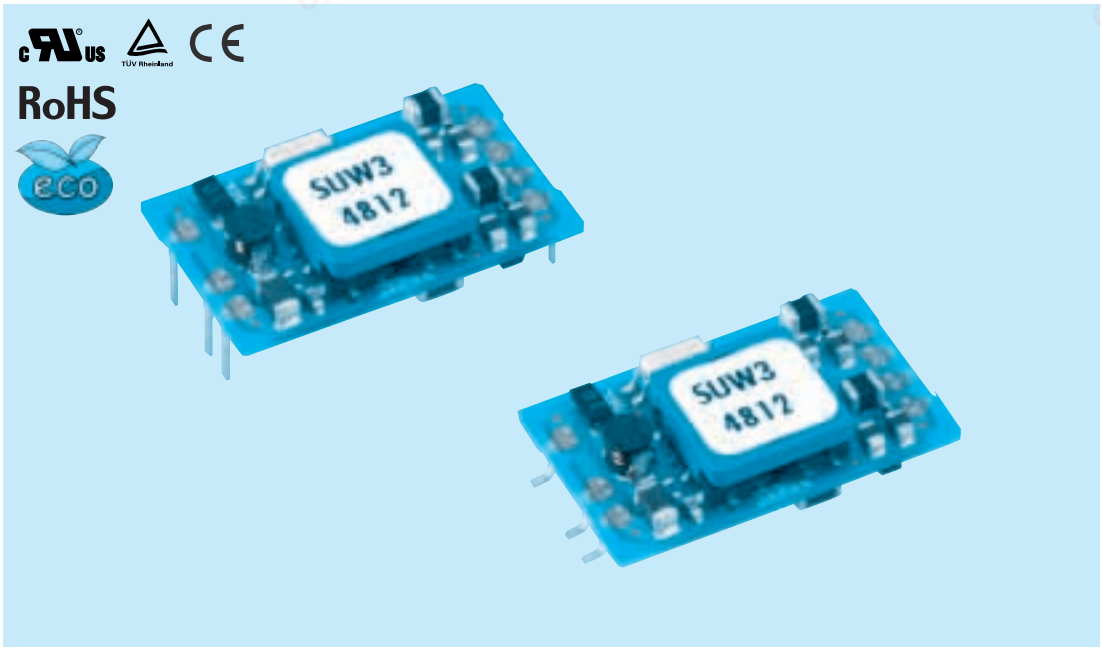
COSEL DC-DC Converters PCB Mount type

SUW3

Ordering information

SU	W	3	12	12	B	P	-□
①	②	③	④	⑤	⑥	⑦	⑧

①Series name
②Dual output
③Output wattage
④Input voltage
⑤Output voltage
⑥Mounting type
B :SMD
C :DIP
⑦Packing form
Blank:Plastic cover
P :Tray (SMD type)
⑧Optional
G :Capacitor between Input and Output is removed.



MODEL		SUW30512	SUW30515	SUW31212	SUW31215	SUW32412	SUW32415	SUW34812	SUW34815
MAX OUTPUT WATTAGE[W]		3.12	3	3.12	3	3.12	3	3.12	3
DC OUTPUT	VOLTAGE[V] ＊1	±12 or +24	±15 or +30	±12 or +24	±15 or +30	±12 or +24	±15 or +30	±12 or +24	±15 or +30
	CURRENT[A]	0.13	0.1	0.13	0.1	0.13	0.1	0.13	0.1

SPECIFICATIONS

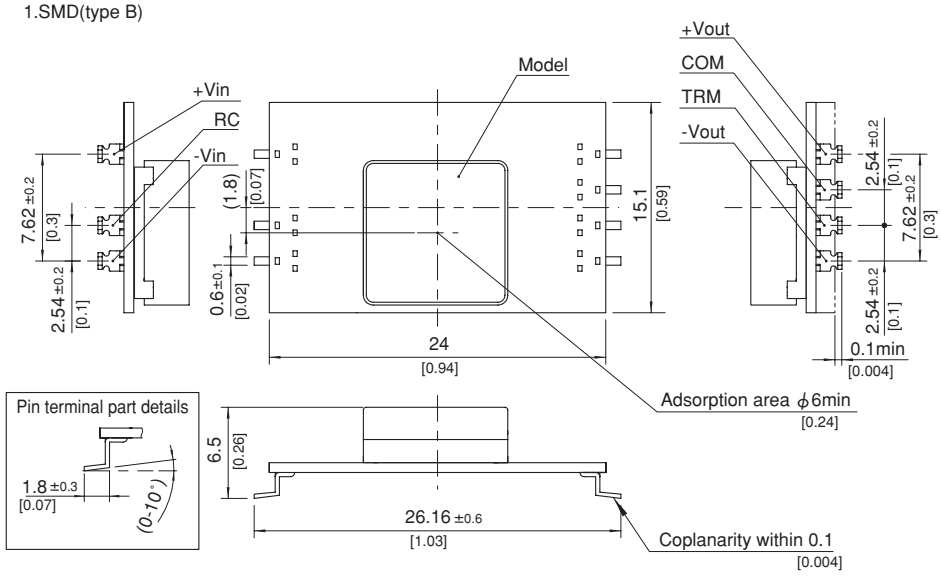
	MODEL		SUW30512	SUW30515	SUW31212	SUW31215	SUW32412	SUW32415	SUW34812	SUW34815
INPUT	VOLTAGE[V]		DC4.5 - 9		DC9 - 18		DC18 - 36		DC36 - 76	
	CURRENT[A]	＊2	0.822typ	0.790typ	0.334typ	0.321typ	0.167typ	0.161typ	0.084typ	0.081typ
	EFFICIENCY[%]	＊2	76typ	76typ	78typ	78typ	78typ	78typ	78typ	78typ
OUTPUT	VOLTAGE[V]		±12(+24)	±15(+30)	±12(+24)	±15(+30)	±12(+24)	±15(+30)	±12(+24)	±15(+30)
	CURRENT[A]		0.13	0.1	0.13	0.1	0.13	0.1	0.13	0.1
	LINE REGULATION[mV]		60max	75max	60max	75max	60max	75max	60max	75max
	LOAD REGULATION[mV]		600max	750max	600max	750max	600max	750max	600max	750max
	RIPPLE[mVp-p]	-20 to +55℃ ＊3	120max	120max	120max	120max	120max	120max	120max	120max
		-40 to -20℃ ＊3	150max	150max	150max	150max	150max	150max	150max	150max
	RIPPLE NOISE[mVp-p]	-20 to +55℃ ＊3	150max	150max	150max	150max	150max	150max	150max	150max
		-40 to -20℃ ＊3	200max	200max	200max	200max	200max	200max	200max	200max
	TEMPERATURE REGULATION[mV]	-20 to +55℃	150max	180max	150max	180max	150max	180max	150max	180max
		-40 to +55℃	240max	290max	240max	290max	240max	290max	240max	290max
	DRIFT[mV]	＊4	50max	60max	50max	60max	50max	60max	50max	60max
	START-UP TIME[ms]		20max (Minimum input, Io=100%)							
	OUTPUT VOLTAGE ADJUSTMENT RANGE		Fixed (TRM pin open) ±5% adjustable by external VR							
	OUTPUT VOLTAGE SETTING[V] (±5%)		11.40 - 12.60	14.25 - 15.75	11.40 - 12.60	14.25 - 15.75	11.40 - 12.60	14.25 - 15.75	11.40 - 12.60	14.25 - 15.75
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically							
	REMOTE ON/OFF		Provided (Negative logic L : ON, H : OFF)							
ISOLATION	INPUT-OUTPUT		AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-40 to +85℃, 20 - 95%RH (Non condensing) (Required Derating), 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE		-40 to +100℃, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max							
	VIBRATION		10 - 55Hz, 98.0m/s² (10G), 3minutes period, 60minutes each along X, Y and Z axis							
	IMPACT		490.3m/s² (50G), 11ms, once each along X, Y and Z axis							
SAFETY	AGENCY APPROVALS		UL60950-1, C-UL, EN60950-1							
OTHERS	CASE SIZE/WEIGHT		24×6.5×15.1mm [0.94×0.26×0.59 inches] (W×H×D) / 3g max							
	COOLING METHOD		Convection/Forced air							

＊1 Output pins can be connected in series to make a 24V/30V output.
＊2 Rated input 5V, 12V, 24V or 48V DC Io=100%
＊3 Ripple and Ripple Noise is measured by using measuring board with capacitor with in 25mm from output pin terminals.
＊4 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃.
＊ Parallel operation with other model is not possible.

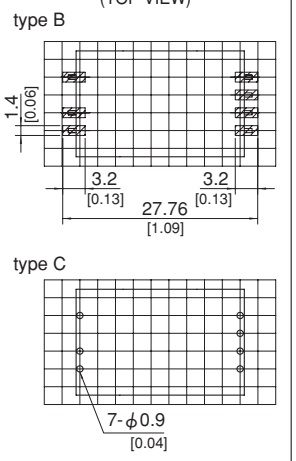
chanhvinh.com

External view

1.SMD(type B)

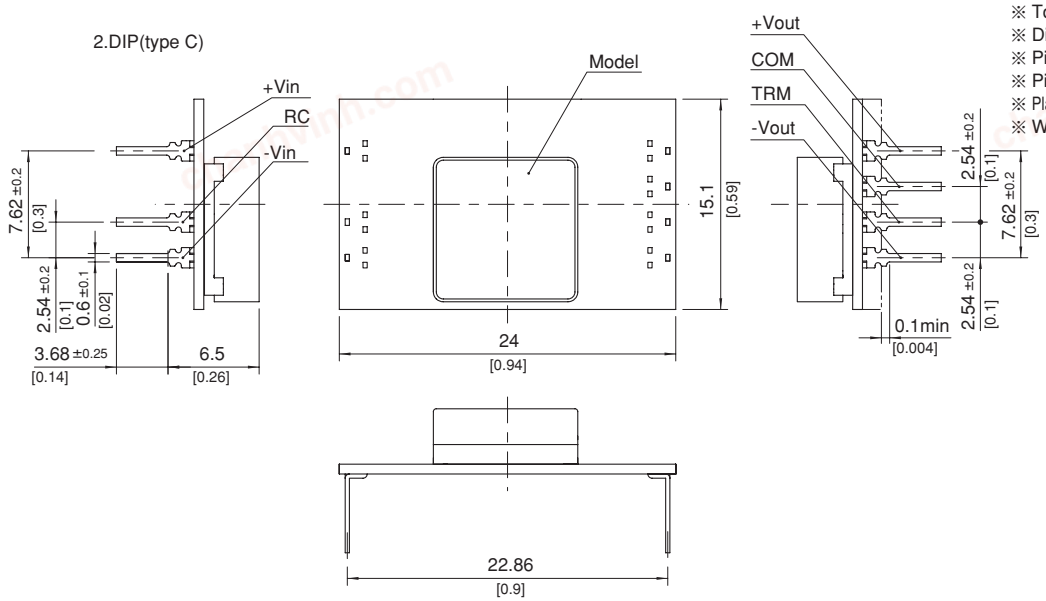


Recommended Pad and Hole dia.
(TOP VIEW)



Unit : 0.1inch
Dimensions in mm, [ ]=inches

2.DIP(type C)



※ Tolerance ±0.5 [±0.02]
※ Dimensions in mm, [ ]=inches
※ Pin terminal thickness : 0.3±0.1 [0.012]
※ Pin terminal material : Copper alloy
※ Plating treatment of terminal : Lead free plating
※ Weight : 3g max

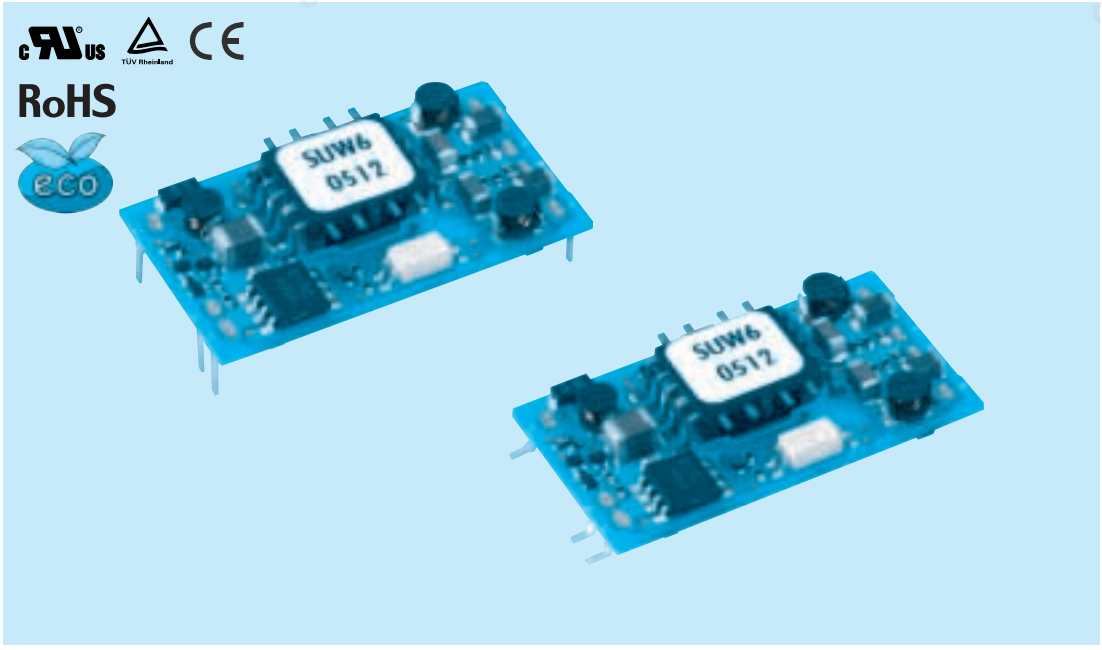
chanhvinh.com

COSEL DC-DC Converters PCB Mount type

SUW6

Ordering information

SU	W	6	12	12	B	P	-□
①	②	③	④	⑤	⑥	⑦	⑧



①Series name
②Dual output
③Output wattage
④Input voltage
⑤Output voltage
⑥Mounting type
B :SMD
C :DIP
⑦Packing form
Blank:Plastic cover
P :Tray (SMD type)
⑧Optional
G :Capacitor between Input and Output is removed.

MODEL		SUW60512	SUW60515	SUW61212	SUW61215	SUW62412	SUW62415	SUW64812	SUW64815
MAX OUTPUT WATTAGE[W]		6	6	6	6	6	6	6	6
DC OUTPUT	VOLTAGE[V] ＊1	±12 or +24	±15 or +30	±12 or +24	±15 or +30	±12 or +24	±15 or +30	±12 or +24	±15 or +30
	CURRENT[A]	0.25	0.2	0.25	0.2	0.25	0.2	0.25	0.2

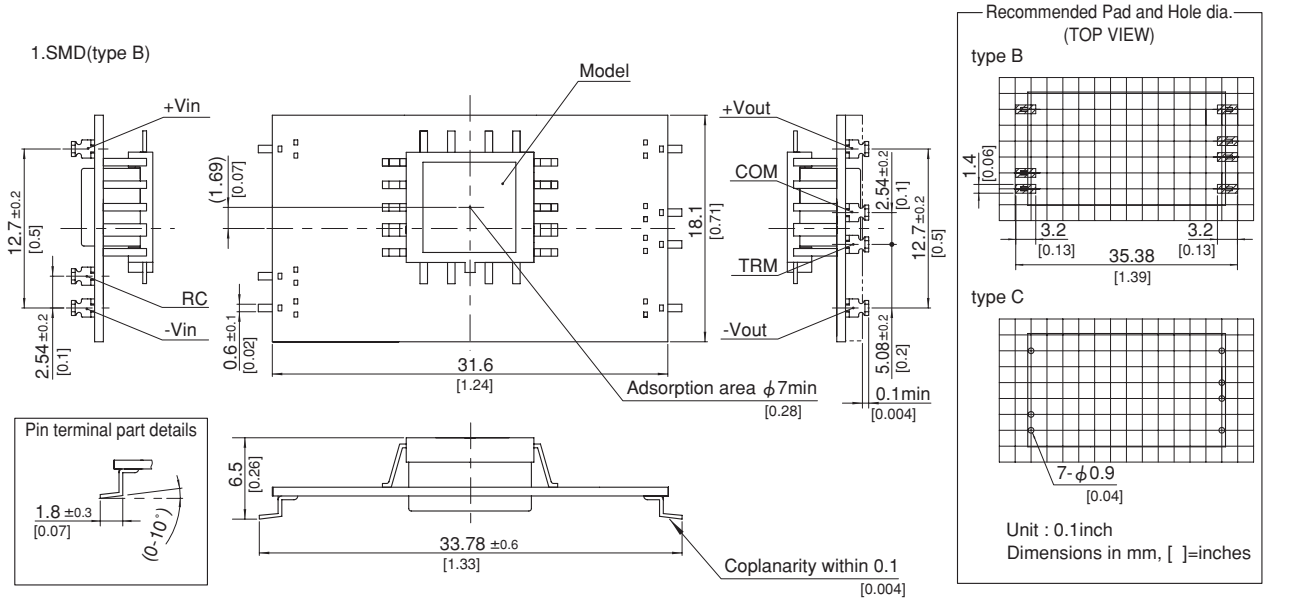
SPECIFICATIONS

	MODEL		SUW60512	SUW60515	SUW61212	SUW61215	SUW62412	SUW62415	SUW64812	SUW64815
INPUT	VOLTAGE[V]		DC4.5 - 9		DC9 - 18		DC18 - 36		DC36 - 76	
	CURRENT[A]	＊2	1.538typ	1.538typ	0.588typ	0.588typ	0.291typ	0.291typ	0.145typ	0.145typ
	EFFICIENCY[%]	＊2	78typ	78typ	85typ	85typ	86typ	86typ	86typ	86typ
OUTPUT	VOLTAGE[V]		±12(+24)	±15(+30)	±12(+24)	±15(+30)	±12(+24)	±15(+30)	±12(+24)	±15(+30)
	CURRENT[A]		0.25	0.2	0.25	0.2	0.25	0.2	0.25	0.2
	LINE REGULATION[mV]		60max	75max	60max	75max	60max	75max	60max	75max
	LOAD REGULATION[mV]		600max	750max	600max	750max	600max	750max	600max	750max
	RIPPLE[mVp-p]	-20 to +55℃ ＊3	120max	120max	120max	120max	120max	120max	120max	120max
		-40 to -20℃ ＊3	150max	150max	150max	150max	150max	150max	150max	150max
	RIPPLE NOISE[mVp-p]	-20 to +55℃ ＊3	150max	150max	150max	150max	150max	150max	150max	150max
		-40 to -20℃ ＊3	200max	200max	200max	200max	200max	200max	200max	200max
	TEMPERATURE REGULATION[mV]	-20 to +55℃	150max	180max	150max	180max	150max	180max	150max	180max
		-40 to +55℃	240max	290max	240max	290max	240max	290max	240max	290max
	DRIFT[mV]	＊4	50max	60max	50max	60max	50max	60max	50max	60max
	START-UP TIME[ms]		20max (Minimum input, Io=100%)							
	OUTPUT VOLTAGE ADJUSTMENT RANGE		Fixed (TRM pin open) ±5% adjustable by external VR							
	OUTPUT VOLTAGE SETTING[V] (±5%)		11.40 - 12.60	14.25 - 15.75	11.40 - 12.60	14.25 - 15.75	11.40 - 12.60	14.25 - 15.75	11.40 - 12.60	14.25 - 15.75
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically							
	REMOTE ON/OFF		Provided (Negative logic L : ON, H : OFF)							
ISOLATION	INPUT-OUTPUT		AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-40 to +85℃, 20 - 95%RH (Non condensing) (Required Derating), 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE		-40 to +100℃, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max							
	VIBRATION		10 - 55Hz, 98.0m/s² (10G), 3minutes period, 60minutes each along X, Y and Z axis							
	IMPACT		490.3m/s² (50G), 11ms, once each along X, Y and Z axis							
SAFETY	AGENCY APPROVALS		UL60950-1, C-UL, EN60950-1							
OTHERS	CASE SIZE/WEIGHT		31.6×6.5×18.1mm [1.24×0.26×0.71 inches] (W×H×D) / 4g max							
	COOLING METHOD		Convection/Forced air							

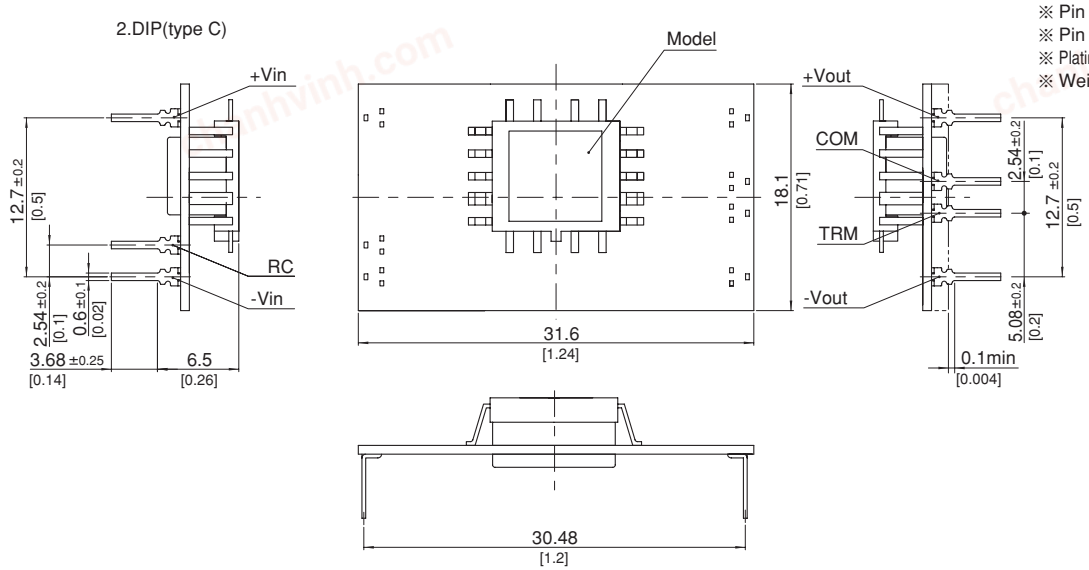
＊1 Output pins can be connected in series to make a 24V/30V output.
＊2 Rated input 5V, 12V, 24V or 48V DC Io=100%
＊3 Ripple and Ripple Noise is measured by using measuring board with capacitor with in 25mm from output pin terminals.
＊4 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃.
＊ Parallel operation with other model is not possible.

chanhvinh.com

External view



※ Tolerance ±0.5 [±0.02]
※ Dimensions in mm, [ ]=inches
※ Pin terminal thickness : 0.3±0.1 [0.012]
※ Pin terminal material : Copper alloy
※ Plating treatment of terminal : Lead free plating
※ Weight : 4g max



chanhvinh.com

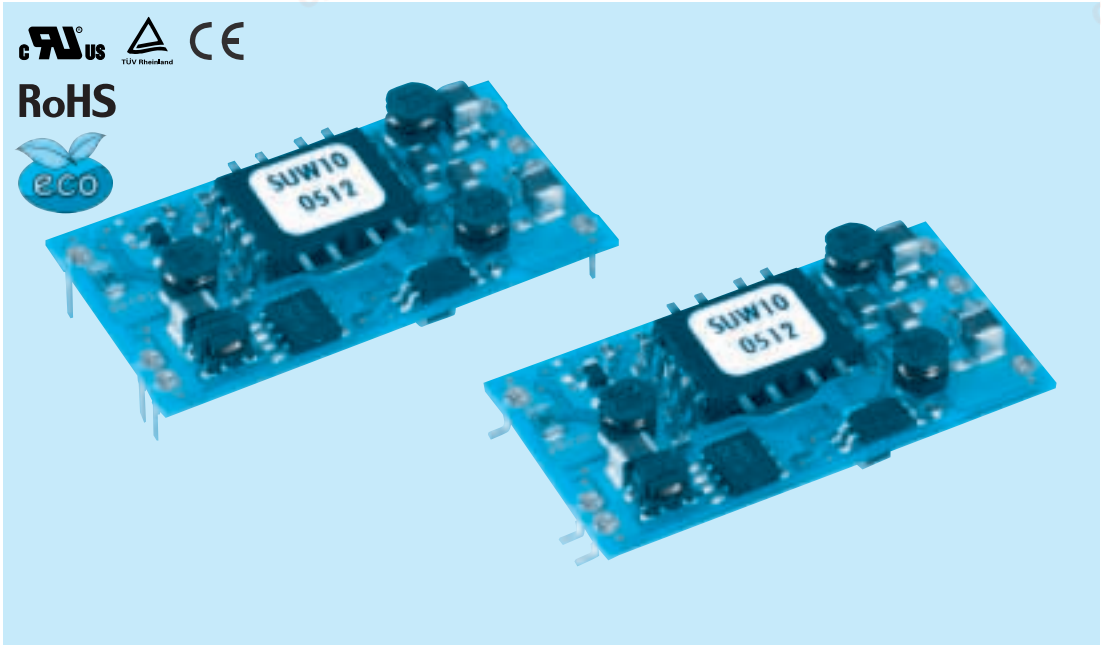
COSEL DC-DC Converters PCB Mount type

SUW10

Ordering information

SU W 10 12 12 B P -□
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Series name
②Dual output
③Output wattage
④Input voltage
⑤Output voltage
⑥Mounting type
B :SMD
C :DIP
⑦Packing form
Blank:Plastic cover
P :Tray(SMD type)
⑧Optional
G :Capacitor between Input and Output is removed.



MODEL		SUW100512	SUW100515	SUW101212	SUW101215	SUW102412	SUW102415	SUW104812	SUW104815
MAX OUTPUT WATTAGE[W]		10.8	10.5	10.8	10.5	10.8	10.5	10.8	10.5
DC OUTPUT	VOLTAGE[V] ＊1	±12 or +24	±15 or +30	±12 or +24	±15 or +30	±12 or +24	±15 or +30	±12 or +24	±15 or +30
	CURRENT[A]	0.45	0.35	0.45	0.35	0.45	0.35	0.45	0.35

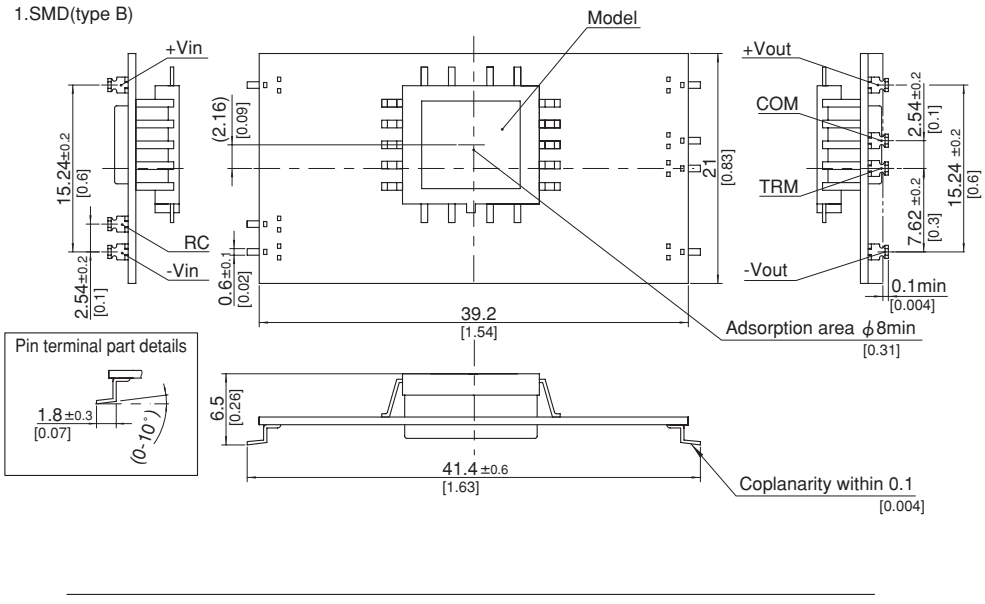
SPECIFICATIONS

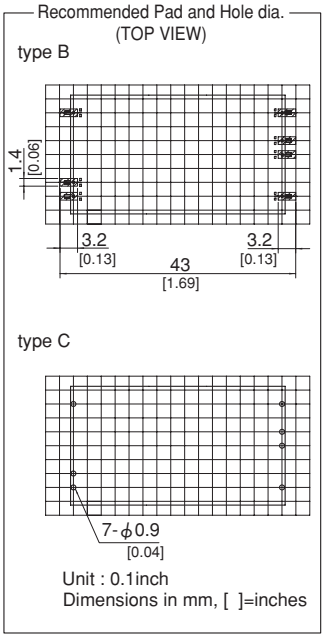
	MODEL		SUW100512	SUW100515	SUW101212	SUW101215	SUW102412	SUW102415	SUW104812	SUW104815
INPUT	VOLTAGE[V]		DC4.5 - 9		DC9 - 18		DC18 - 36		DC36 - 76	
	CURRENT[A]	＊2	2.51typ	2.44typ	1.05typ	1.02typ	0.523typ	0.509typ	0.262typ	0.254typ
	EFFICIENCY[%]	＊2	86typ	86typ	86typ	86typ	86typ	86typ	86typ	86typ
OUTPUT	VOLTAGE[V]		±12(+24)	±15(+30)	±12(+24)	±15(+30)	±12(+24)	±15(+30)	±12(+24)	±15(+30)
	CURRENT[A]		0.45	0.35	0.45	0.35	0.45	0.35	0.45	0.35
	LINE REGULATION[mV]		60max	75max	60max	75max	60max	75max	60max	75max
	LOAD REGULATION[mV]		600max	750max	600max	750max	600max	750max	600max	750max
	RIPPLE[mVp-p]	-20 to +55℃ ＊3	120max	120max	120max	120max	120max	120max	120max	120max
		-40 to -20℃ ＊3	150max	150max	150max	150max	150max	150max	150max	150max
	RIPPLE NOISE[mVp-p]	-20 to +55℃ ＊3	150max	150max	150max	150max	150max	150max	150max	150max
		-40 to -20℃ ＊3	200max	200max	200max	200max	200max	200max	200max	200max
	TEMPERATURE REGULATION[mV]	-20 to +55℃	150max	180max	150max	180max	150max	180max	150max	180max
		-40 to +55℃	240max	290max	240max	290max	240max	290max	240max	290max
	DRIFT[mV]	＊4	50max	60max	50max	60max	50max	60max	50max	60max
	START-UP TIME[ms]		20max (Minimum input, Io=100%)							
	OUTPUT VOLTAGE ADJUSTMENT RANGE		Fixed (TRM pin open) ±5% adjustable by external VR							
	OUTPUT VOLTAGE SETTING[V] (±5%)		11.40 - 12.60	14.25 - 15.75	11.40 - 12.60	14.25 - 15.75	11.40 - 12.60	14.25 - 15.75	11.40 - 12.60	14.25 - 15.75
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically							
	REMOTE ON/OFF		Provided (Negative logic L : ON, H : OFF)							
ISOLATION	INPUT-OUTPUT		AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-40 to +85℃, 20 - 95%RH (Non condensing) (Required Derating), 3,000m (10,000feet) max							
	STORAGE TEMP.,HUMID.AND ALTITUDE		-40 to +100℃, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max							
	VIBRATION		10 - 55Hz, 98.0m/s² (10G), 3minutes period, 60minutes each along X, Y and Z axis							
	IMPACT		490.3m/s² (50G), 11ms, once each along X, Y and Z axis							
SAFETY	AGENCY APPROVALS		UL60950-1, C-UL, EN60950-1							
OTHERS	CASE SIZE/WEIGHT		39.2×6.5×21.0mm [1.54×0.26×0.83 inches] (W×H×D) / 6g max							
	COOLING METHOD		Convection/Forced air							

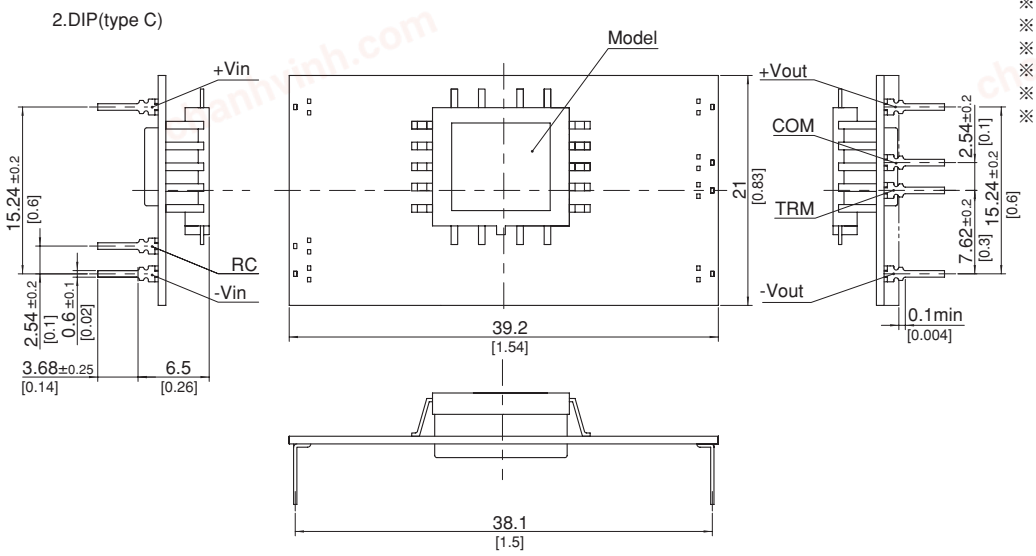
＊1 Output pins can be connected in series to make a 24V/30V output.
＊2 Rated input 5V, 12V, 24V or 48V DC Io=100%
＊3 Ripple and Ripple Noise is measured by using measuring board with capacitor with in 25mm from output pin terminals.
＊4 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃.
＊ Parallel operation with other model is not possible.

chanhvinh.com

External view







※ Tolerance ±0.5 [±0.02]
※ Dimensions in mm, [ ]=inches
※ Pin terminal thickness : 0.3±0.1 [0.012]
※ Pin terminal material : Copper alloy
※ Plating treatment of terminal : Lead free plating
※ Weight : 6g max