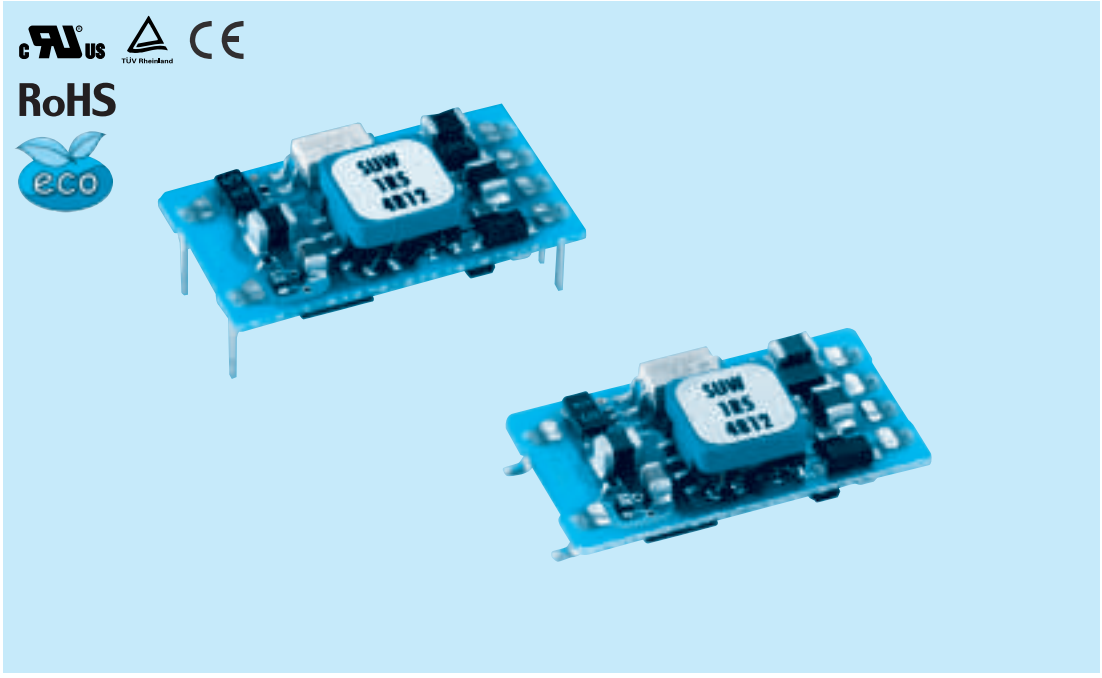
COSEL DC-DC Converters PCB Mount type

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

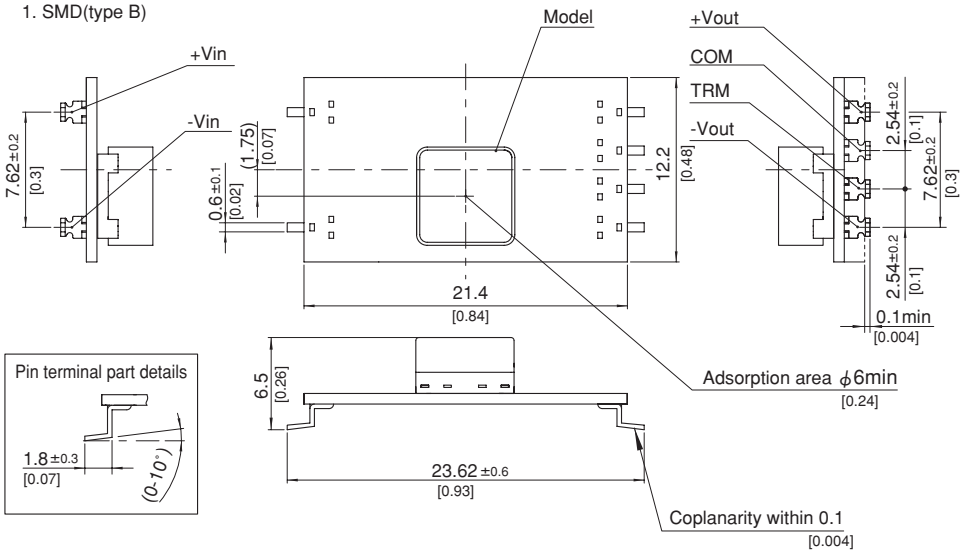
SPECIFICATIONS

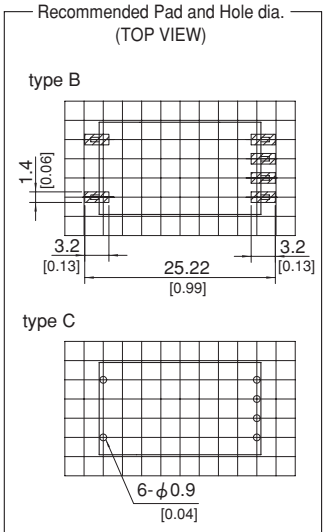
	MODEL		SUW1R50512	SUW1R50515	SUW1R51212	SUW1R51215	SUW1R52412	SUW1R52415	SUW1R54812	SUW1R54815
INPUT	VOLTAGE[V]		DC4.5 - 9		DC9 - 18		DC18 - 36		DC36 - 76	
	CURRENT[A]	∗2	0.433typ	0.417typ	0.173typ	0.167typ	0.087typ	0.083typ	0.043typ	0.042typ
	EFFICIENCY[%]	∗2	72typ	72typ	75typ	75typ	75typ	75typ	75typ	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/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		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.

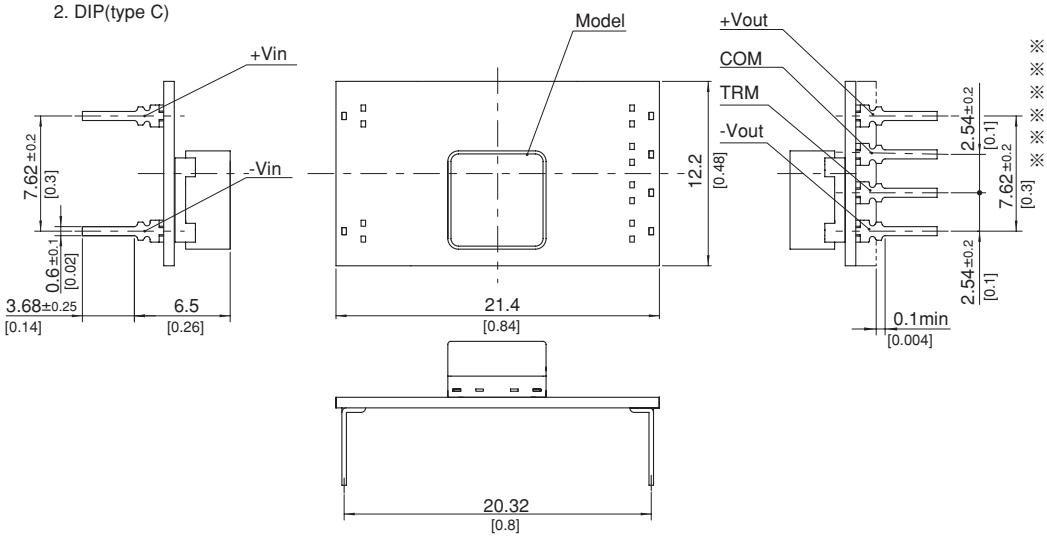
External view

1. SMD(type B)





2. DIP(type C)



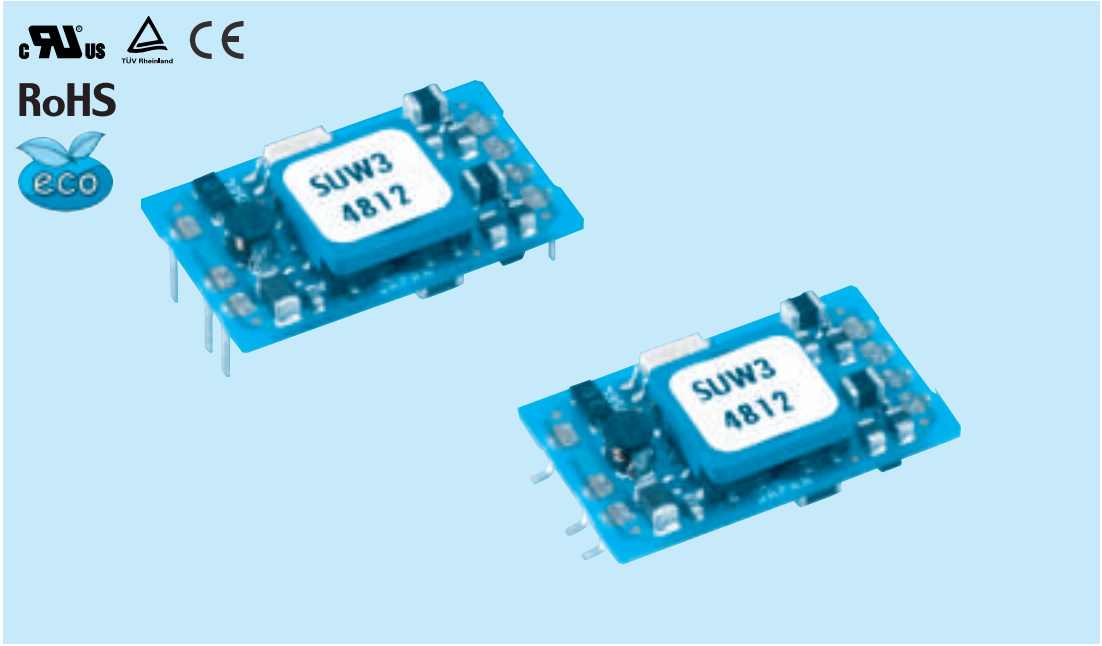
※ Tolerance ±0.5 [±0.02]
※ Dimensions in mm, [ ]=inches
※ Pin terminal thickness : 0.3±0.1 [0.012]
※ Pin terminal material : Copper alloy
※ Plating treatment of terminal : Lead free plating
※ Weight : 2g max

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

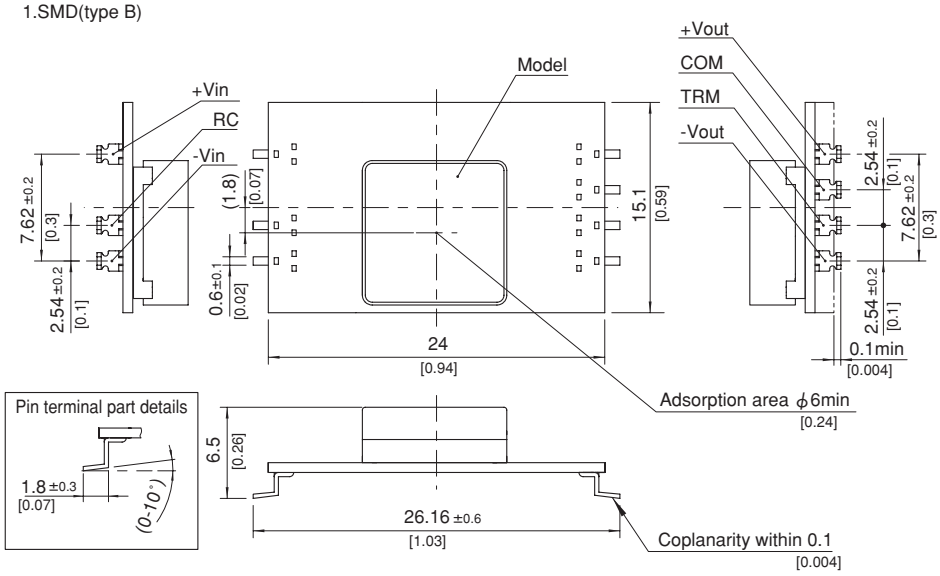
SPECIFICATIONS

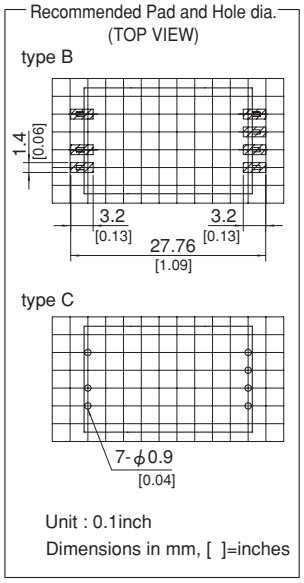
	MODEL		SUW30512	SUW30515	SUW31212	SUW31215	SUW32412	SUW32415	SUW34812	SUW34815
INPUT	VOLTAGE[V]		DC4.5 - 9		DC9 - 18		DC18 - 36		DC36 - 76	
	CURRENT[A]	∗2	0.822typ	0.790typ	0.334typ	0.321typ	0.167typ	0.161typ	0.084typ	0.081typ
	EFFICIENCY[%]	∗2	76typ	76typ	78typ	78typ	78typ	78typ	78typ	78typ
OUTPUT	VOLTAGE[V]		±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.

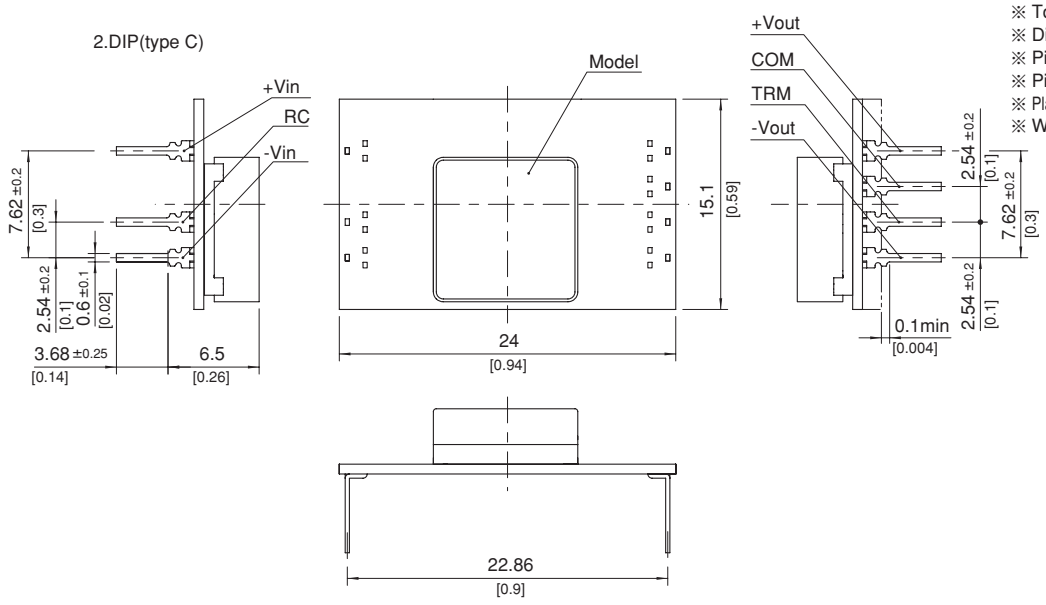
External view

1.SMD(type B)





2.DIP(type C)



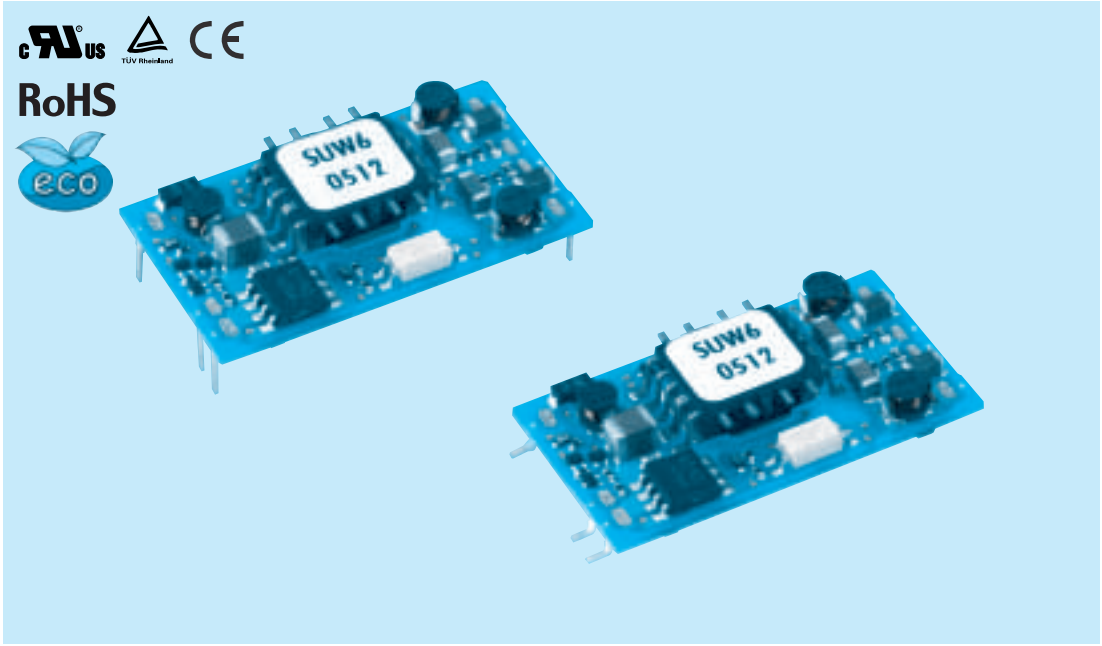
※ Tolerance ±0.5 [±0.02]
※ Dimensions in mm, [ ]=inches
※ Pin terminal thickness : 0.3±0.1 [0.012]
※ Pin terminal material : Copper alloy
※ Plating treatment of terminal : Lead free plating
※ Weight : 3g max

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

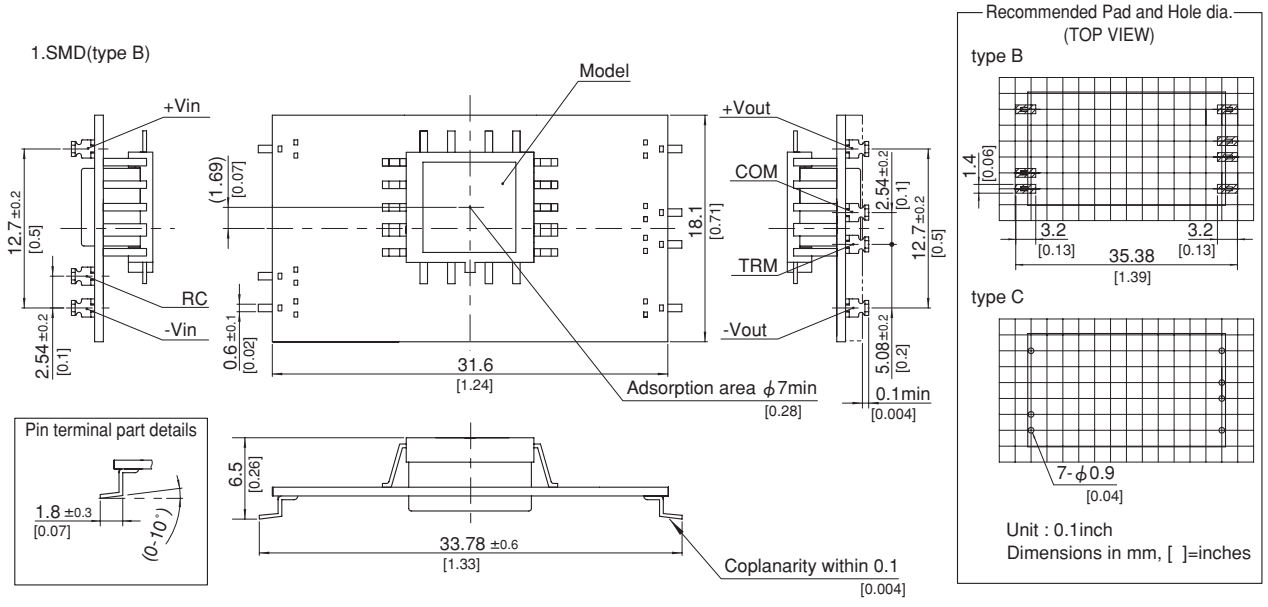
SPECIFICATIONS

	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							

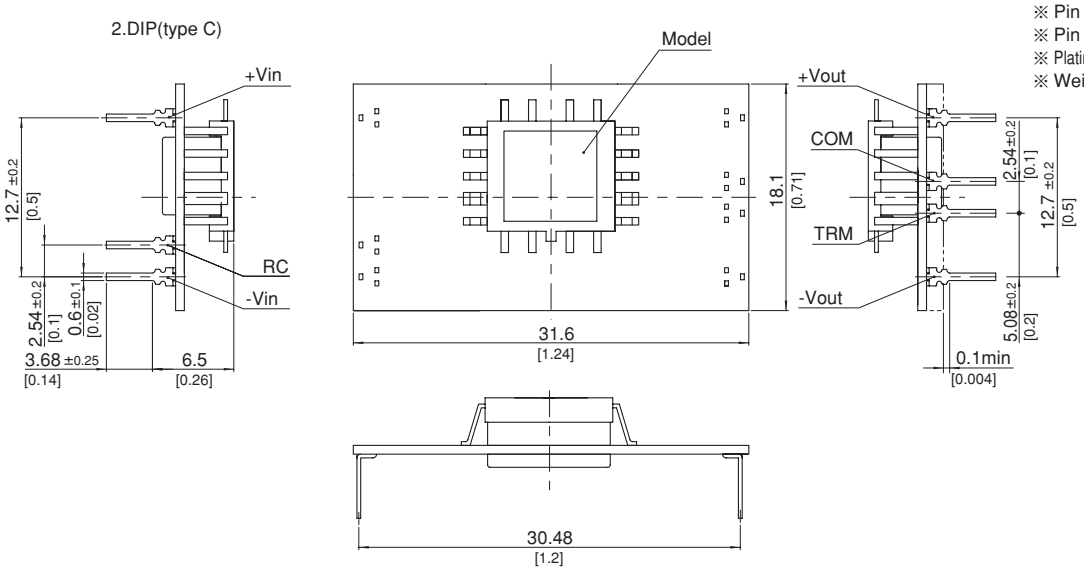
SU-SUC/SUT

＊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.

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

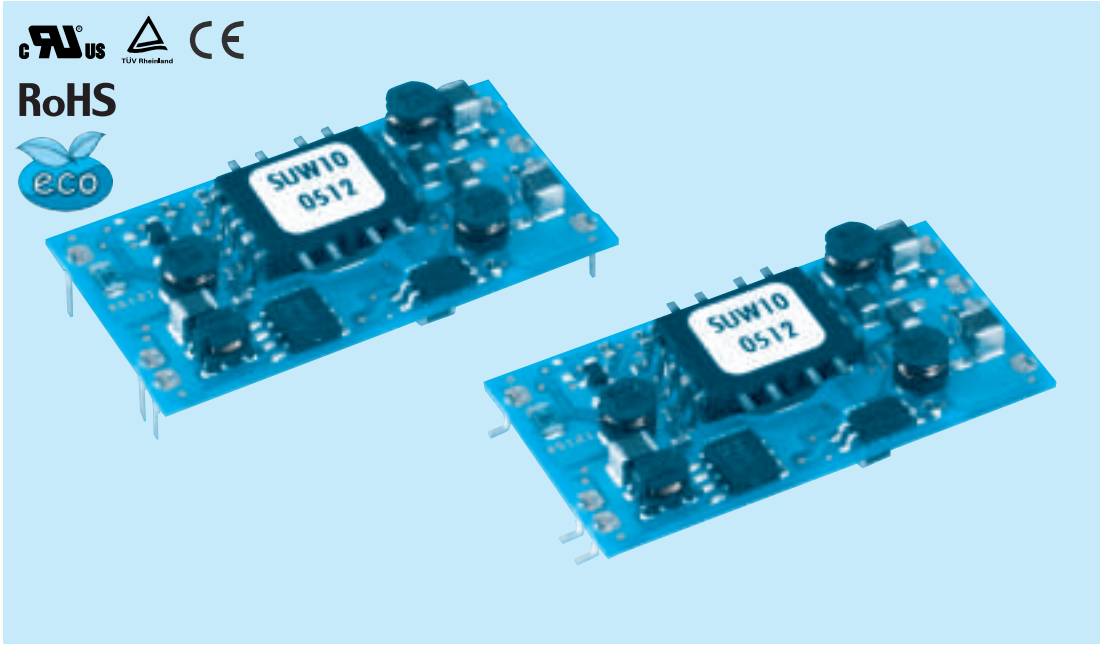


COSEL DC-DC Converters PCB Mount type

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

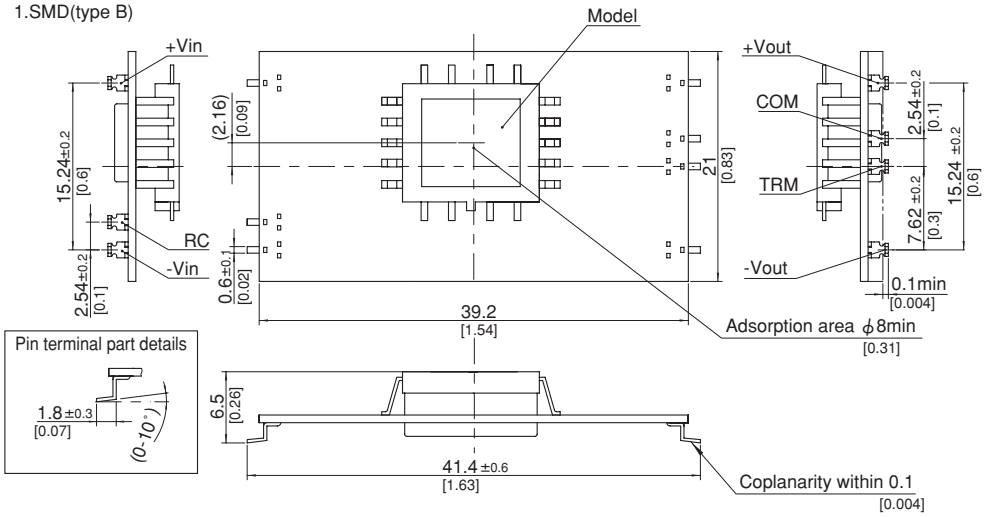
SPECIFICATIONS

	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.

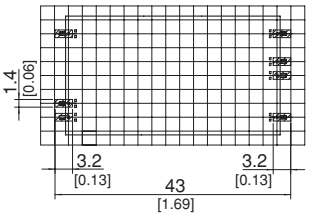
External view

1.SMD(type B)

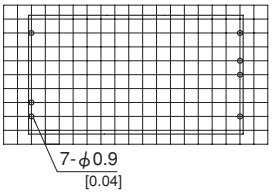


Recommended Pad and Hole dia.
(TOP VIEW)

type B

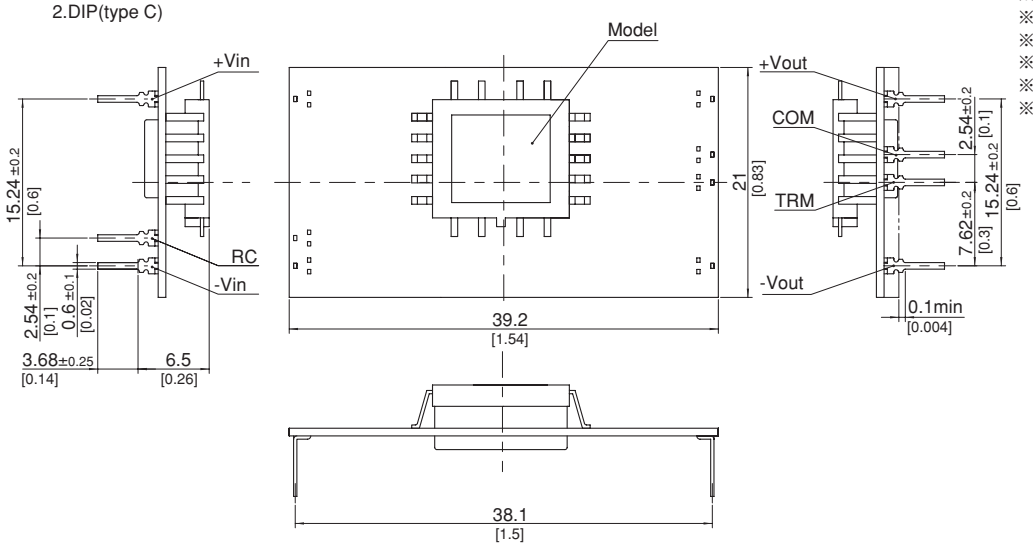


type C



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 : 6g max

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Cosel:

SUW62415B SUW60512B SUW32415BP SUW64815BP SUW1R50515BP SUW100515C SUW1R52412C SUW61215B SUW31215BP-G SUW100512C SUW104812B SUW101212C SUW1R54812C SUW30515B SUW102412C-G SUW1R52415C SUW31212B SUW1R51212BP SUW61215C-G SUW1R52412BP SUW32412C SUW34812C SUW32415C-G SUW101215C SUW100512BP SUW1R54815C SUW62412BP SUW32412B-G SUW104815B SUW62412C-G SUW31212C-G SUW64812B SUW102415C-G SUW1R51215BP SUW100515BP SUW1R50515B SUW104812C SUW102412B-G SUW32415B-G SUW62415BP SUW1R51215B SUW32415C SUW34812BP SUW102415C SUW1R52412B SUW31212C SUW101212BP SUW32412BP-G SUW1R54812BP SUW30512BP SUW31215B-G SUW1R51212C SUW102412BP-G SUW32415BP-G SUW34815BP SUW104812BP SUW64815C SUW101215C-G SUW31212BP SUW34812B SUW101212B SUW1R50512BP SUW61212C-G SUW60512BP SUW32412BP SUW102415BP-G SUW1R51215C SUW101215BP SUW61212C SUW100515B SUW1R52415B SUW62415C SUW61215BP SUW62415B-G SUW101215B SUW62412B SUW102415B SUW62412BP-G SUW100512B SUW1R50512B SUW64815B SUW61215C SUW31215BP SUW60512C SUW30512B SUW100512B-G SUW62412B-G SUW102415B-G SUW104815C SUW32412C-G SUW32415B SUW1R50512C SUW64812C SUW1R50515C SUW30515BP SUW1R54812B SUW104815BP SUW31215C SUW34815B SUW61212BP

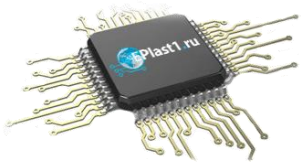
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.