



Low Profile



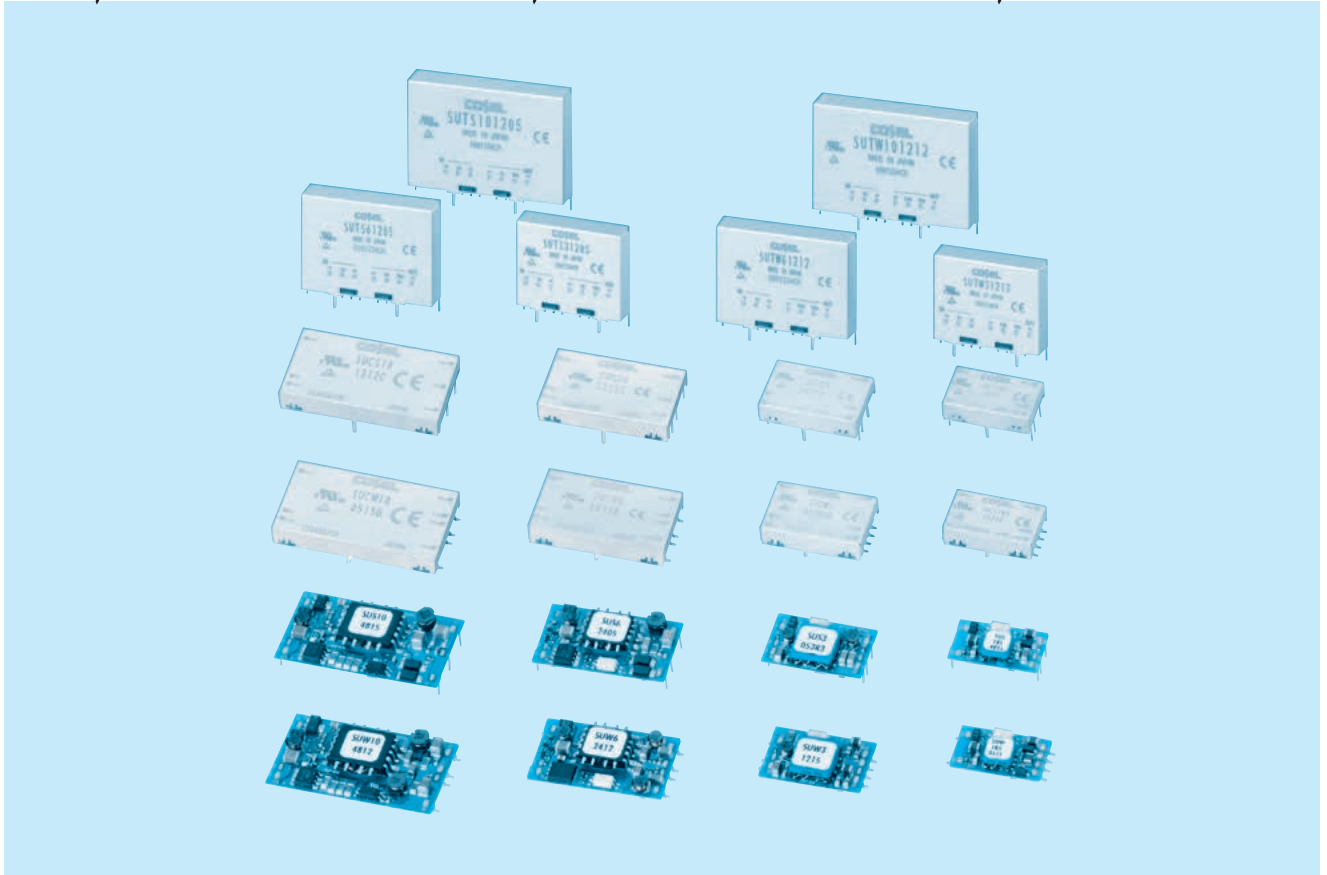
Isolated



OCP

Safety
Approvals

SUS, SUW-series / SUCS, SUCW-series / SUTS, SUTW-series



Feature

- SMD mounting type and through-hole mounting type
- High efficiency (synchronous rectifier circuit)
- Built-in overcurrent protection circuits
- Built-in remote ON/OFF (SU / SUC / SUT 3-10)
- High reliability : not built-in aluminum and tantalum electrolytic capacitor

CE marking

- Low Voltage Directive
- RoHS Directive

Safety agency approvals

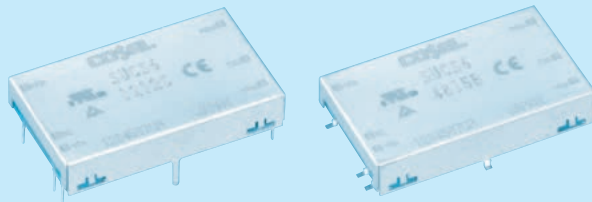
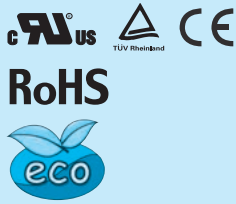
- UL60950-1, C-UL, EN62368-1

5-year warranty

SUCS6

SUC S 6 12 05 B P - □

① ② ③ ④ ⑤ ⑥ ⑦ ⑧



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Input voltage
- ⑤ Output voltage
- ⑥ Mounting type
B :SMD
C :DIP
- ⑦ Packing form
Blank:Plastic cover
P :Tray (SMD type)
- ⑧ Optional
G :Capacitor between Input and Output is removed.
C :with coating (only DIP type)*
* Safety standards are pending

MODEL	SUCS6053R3	SUCS60505	SUCS60512	SUCS60515	SUCS6123R3	SUCS61205	SUCS61212	SUCS61215	
MAX OUTPUT WATTAGE[W]	3.96	5	6	6	4.46	6	6	6	
DC OUTPUT	VOLTAGE[V] *1	3.3	5	12	15	3.3	5	12	15
	CURRENT[A]	1.2	1	0.5	0.4	1.35	1.2	0.5	0.4

SPECIFICATIONS

	MODEL	SUCS6053R3	SUCS60505	SUCS60512	SUCS60515	SUCS6123R3	SUCS61205	SUCS61212	SUCS61215	
INPUT	VOLTAGE[V]	DC4.5 - 9				DC9 - 18				
	CURRENT[A] *2	1.100typ	1.316typ	1.500typ	1.500typ	0.502typ	0.617typ	0.588typ	0.588typ	
	EFFICIENCY[%] *2	72typ	76typ	80typ	80typ	74typ	81typ	85typ	85typ	
OUTPUT	VOLTAGE[V]	3.3	5	12	15	3.3	5	12	15	
	CURRENT[A]	1.2	1	0.5	0.4	1.35	1.2	0.5	0.4	
	LINE REGULATION[mV]	20max	20max	48max	60max	20max	20max	48max	60max	
	LOAD REGULATION[mV]	40max	40max	100max	120max	40max	40max	100max	120max	
	RIPPLE[mVp-p]	-20 to +55°C *3	80max	80max	120max	120max	80max	80max	120max	120max
		-40 to -20°C *3	120max	120max	150max	150max	120max	120max	150max	150max
	RIPPLE NOISE[mVp-p]	-20 to +55°C *3	120max	120max	150max	150max	120max	120max	150max	150max
		-40 to -20°C *3	200max	200max	200max	200max	200max	200max	200max	200max
	TEMPERATURE REGULATION[mV]	-20 to +55°C	50max	50max	150max	180max	50max	50max	150max	180max
		-40 to +55°C	80max	80max	240max	290max	80max	80max	240max	290max
	DRIFT[mV] *4	20max	20max	48max	60max	20max	20max	48max	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] (±3%)	3.21 - 3.42	4.90 - 5.21	11.64 - 12.36	14.55 - 15.45	3.21 - 3.42	4.90 - 5.21	11.64 - 12.36	14.55 - 15.45		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically								
	REMOTE ON/OFF	Provided (Negative logic L : ON, H : OFF)								

MODEL	SUCS6243R3	SUCS62405	SUCS62412	SUCS62415	SUCS6483R3	SUCS64805	SUCS64812	SUCS64815	
MAX OUTPUT WATTAGE[W]	4.46	6	6	6	4.46	6	6	6	
DC OUTPUT	VOLTAGE[V] *1	3.3	5	12	15	3.3	5	12	15
	CURRENT[A]	1.35	1.2	0.5	0.4	1.35	1.2	0.5	0.4

SPECIFICATIONS

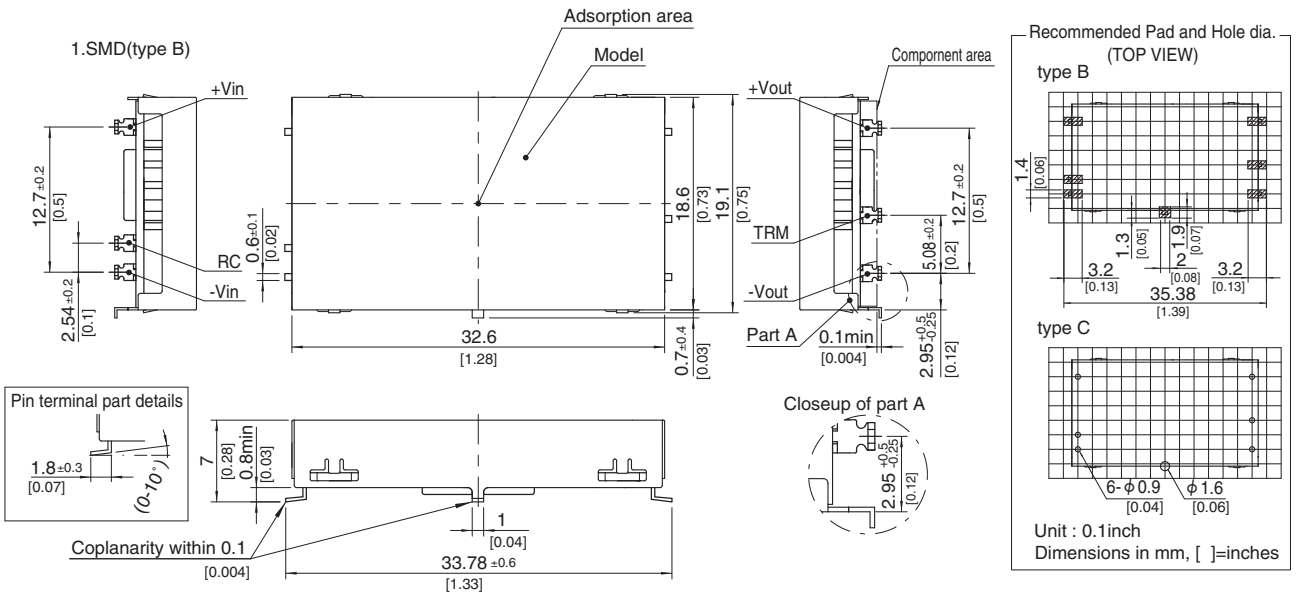
	MODEL	SUCS6243R3	SUCS62405	SUCS62412	SUCS62415	SUCS6483R3	SUCS64805	SUCS64812	SUCS64815	
INPUT	VOLTAGE[V]	DC18 - 36				DC36 - 76				
	CURRENT[A] *2	0.248typ	0.309typ	0.291typ	0.291typ	0.121typ	0.154typ	0.145typ	0.145typ	
	EFFICIENCY[%] *2	75typ	81typ	86typ	86typ	77typ	81typ	86typ	86typ	
OUTPUT	VOLTAGE[V]	3.3	5	12	15	3.3	5	12	15	
	CURRENT[A]	1.35	1.2	0.5	0.4	1.35	1.2	0.5	0.4	
	LINE REGULATION[mV]	20max	20max	48max	60max	20max	20max	48max	60max	
	LOAD REGULATION[mV]	40max	40max	100max	120max	40max	40max	100max	120max	
	RIPPLE[mVp-p]	-20 to +55°C *3	80max	80max	120max	120max	80max	80max	120max	120max
		-40 to -20°C *3	120max	120max	150max	150max	120max	120max	150max	150max
	RIPPLE NOISE[mVp-p]	-20 to +55°C *3	120max	120max	150max	150max	120max	120max	150max	150max
		-40 to -20°C *3	200max	200max	200max	200max	200max	200max	200max	200max
	TEMPERATURE REGULATION[mV]	-20 to +55°C	50max	50max	150max	180max	50max	50max	150max	180max
		-40 to +55°C	80max	80max	240max	290max	80max	80max	240max	290max
	DRIFT[mV] *4	20max	20max	48max	60max	20max	20max	48max	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] (±3%)	3.21 - 3.42	4.90 - 5.21	11.64 - 12.36	14.55 - 15.45	3.21 - 3.42	4.90 - 5.21	11.64 - 12.36	14.55 - 15.45		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically								
	REMOTE ON/OFF	Provided (Negative logic L : ON, H : OFF)								

GENERAL SPECIFICATIONS

ISOLATION	INPUT-OUTPUT	AC500V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (20 \pm 15 $^{\circ}$ C)
	INPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (20 \pm 15 $^{\circ}$ C)
	OUTPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (20 \pm 15 $^{\circ}$ C)
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-40 to +85 $^{\circ}$ C, 20 - 95%RH (Non condensing) (Refer to "Derating"), 3,000m (10,000feet) max
	STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +100 $^{\circ}$ C, 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, EN62368-1
OTHERS	CASE SIZE/WEIGHT	32.6 x 7.0 x 19.1mm [1.28 x 0.28 x 0.75 inches] (W x H x D) / 7g max
	COOLING METHOD	Convection/Forced air

- *1 SUCW6xx12/SUCW6xx15 is available as single output, +24V/+30V.
- *2 Rated input 5V, 12V, 24V or 48V DC I_o=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 $^{\circ}$ C.
- * Parallel operation with other model is not possible.

External view



- ※ Tolerance \pm 0.5 [\pm 0.02]
- ※ Dimensions in mm, []=inches
- ※ Pin terminal thickness : 0.3 \pm 0.1 [0.012]
- ※ Pin terminal material : Copper alloy
- ※ Plating treatment of terminal : Lead free plating
- ※ Case thickness : 0.2 \pm 0.05 [0.008]
- ※ Case material : Brass
- ※ Plating treatment of case : Nickel plating
- ※ Please keep enough creepage distance with the pattern on PCB and other components.
- ※ Weight : 7g max