COSEL DC-DC Converters PCB Mount type

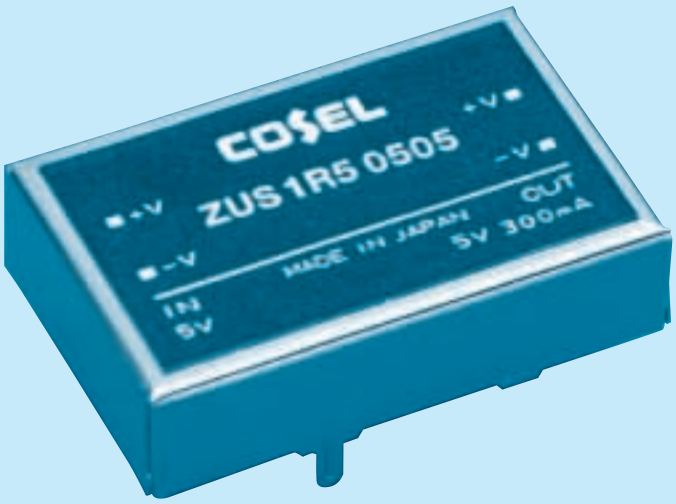
ZUS1R5

Ordering information

ZU	S	1R5	12	05	
①	②	③	④	⑤	

①Series name
②Single output
③Output wattage
④Input voltage
⑤Output voltage

RoHS



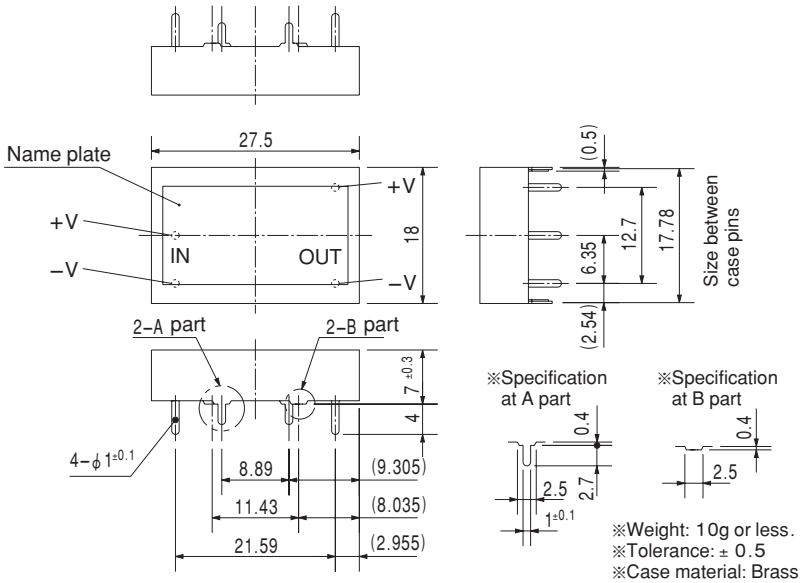
MODEL		ZUS1R50505	ZUS1R50512	ZUS1R50515	ZUS1R51205	ZUS1R51212	ZUS1R51215	ZUS1R52405	ZUS1R52412	ZUS1R52415	ZUS1R54805	ZUS1R54812	ZUS1R54815
MAX OUTPUT WATTAGE[W]		1.50	1.56	1.50	1.50	1.56	1.50	1.50	1.56	1.50	1.50	1.56	1.50
DC OUTPUT	VOLTAGE[V]	5	12	15	5	12	15	5	12	15	5	12	15
	CURRENT[A]	0.30	0.13	0.10	0.30	0.13	0.10	0.30	0.13	0.10	0.30	0.13	0.10

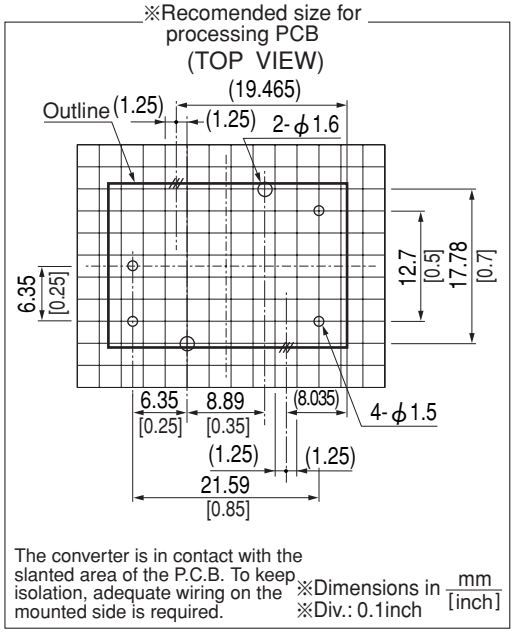
SPECIFICATIONS

	MODEL	ZUS1R50505	ZUS1R50512	ZUS1R50515	ZUS1R51205	ZUS1R51212	ZUS1R51215	ZUS1R52405	ZUS1R52412	ZUS1R52415	ZUS1R54805	ZUS1R54812	ZUS1R54815
INPUT	VOLTAGE[V]	DC4.5 - 9			DC9 - 18			DC18 - 36			DC36 - 72		
	CURRENT[A] *1	0.441typ	0.459typ	0.441typ	0.176typ	0.183typ	0.176typ	0.088typ	0.092typ	0.088typ	0.043typ	0.045typ	0.043typ
	EFFICIENCY[%] *1	68typ	68typ	68typ	71typ	71typ	71typ	71typ	71typ	71typ	73typ	73typ	73typ
OUTPUT	VOLTAGE[V]	5	12	15	5	12	15	5	12	15	5	12	15
	CURRENT[A]	0.30	0.13	0.10	0.30	0.13	0.10	0.30	0.13	0.10	0.30	0.13	0.10
	LINE REGULATION[mV]	20max	48max	60max	20max	48max	60max	20max	48max	60max	20max	48max	60max
	LOAD REGULATION[mV]	40max	100max	120max	40max	100max	120max	40max	100max	120max	40max	100max	120max
	RIPPLE[mVp-p] *2	80max	120max	120max	80max	120max	120max	80max	120max	120max	80max	120max	120max
	RIPPLE NOISE[mVp-p] *2	120max	150max	150max	120max	150max	150max	120max	150max	150max	120max	150max	150max
	TEMPERATURE REGULATION[mV] -20 to +55℃	50max	150max	180max	50max	150max	180max	50max	150max	180max	50max	150max	180max
	DRIFT[mV] *3	20max	48max	60max	20max	48max	60max	20max	48max	60max	20max	48max	60max
	START-UP TIME[ms]	20max (Minimum input, Io=100%)											
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed											
	OUTPUT VOLTAGE SETTING[V]	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75
PROTECTION CIRCUIT	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically											
ISOLATION	INPUT-OUTPUT	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)											
	INPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)											
	OUTPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)											
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-20 to +71℃, 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max											
	STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +85℃, 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 X, Y and Z axis											
SAFETY	AGENCY APPROVALS	UL60950-1, EN60950-1, EN50178, CSA C22.2 No.60950-1 Complies with IEC60950-1											
OTHERS	CASE SIZE/WEIGHT	27.5×7×18mm (W×H×D) / 10g max											
	COOLING METHOD	Convection											

*1 Rated input 5V, 12V, 24V or 48V DC Io=100%.
*2 Measured by 20MHz oscilloscope.
*3 The drift is a change at 25℃ of ambient temperature and 30 minutes - 8 hours after the input voltage applied at rated input/output.
* Series/Parallel operation with other model is not possible.

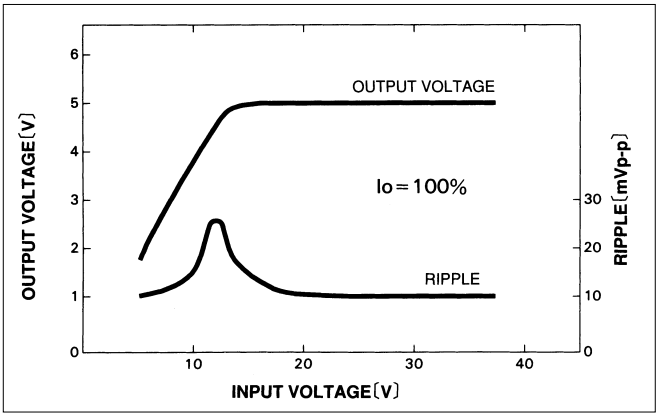
External view



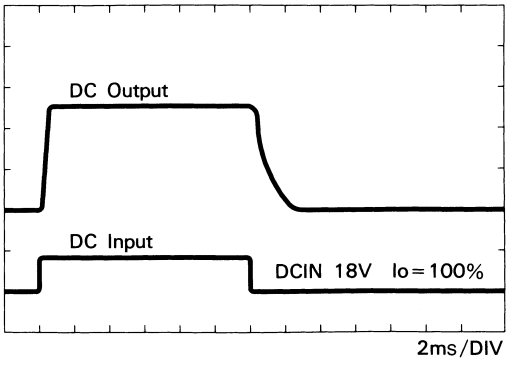


Performance data

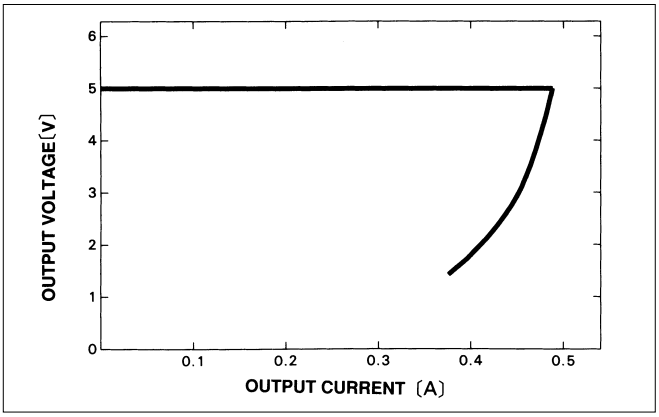
■STATIC CHARACTERISTICS (ZUS1R52405)



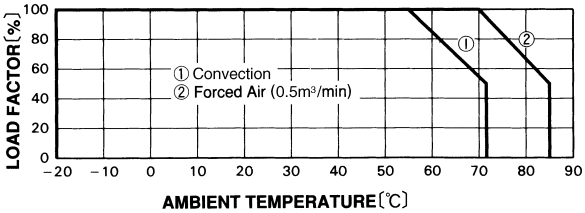
■RISE TIME & FALL TIME (ZUS1R52405)



■OVERCURRENT CHARACTERISTICS (ZUS1R52405)



■DERATING CURVE



COSEL DC-DC Converters PCB Mount type

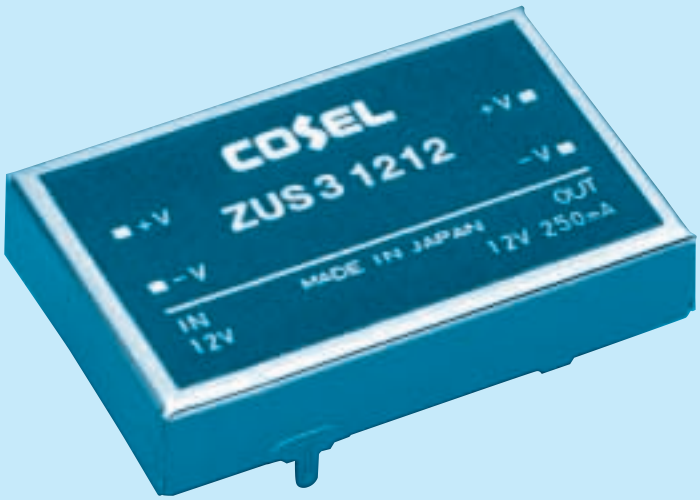
ZUS3

Ordering information

ZU	S	3	12	05	
①	②	③	④	⑤	

①Series name
②Single output
③Output wattage
④Input voltage
⑤Output voltage

RoHS



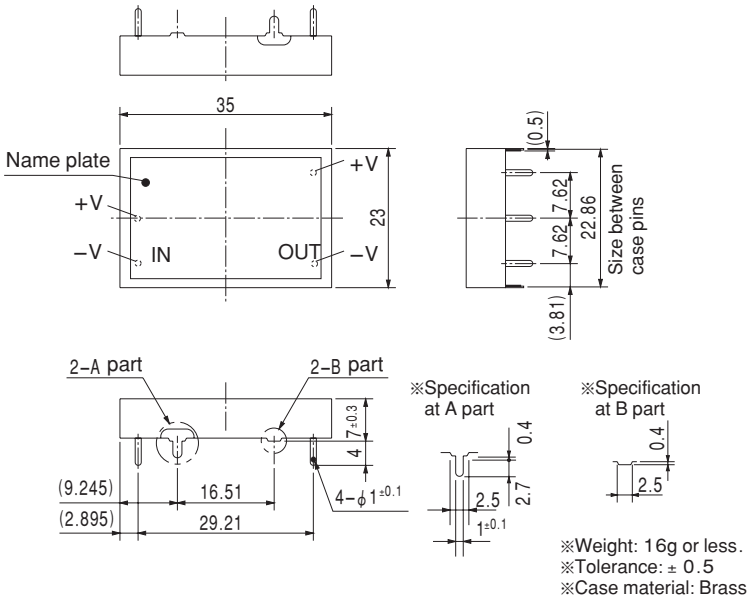
MODEL		ZUS30505	ZUS30512	ZUS30515	ZUS31205	ZUS31212	ZUS31215	ZUS32405	ZUS32412	ZUS32415	ZUS34805	ZUS34812	ZUS34815
MAX OUTPUT WATTAGE[W]		3	3	3	3	3	3	3	3	3	3	3	3
DC OUTPUT	VOLTAGE[V]	5	12	15	5	12	15	5	12	15	5	12	15
	CURRENT[A]	0.60	0.25	0.20	0.60	0.25	0.20	0.60	0.25	0.20	0.60	0.25	0.20

SPECIFICATIONS

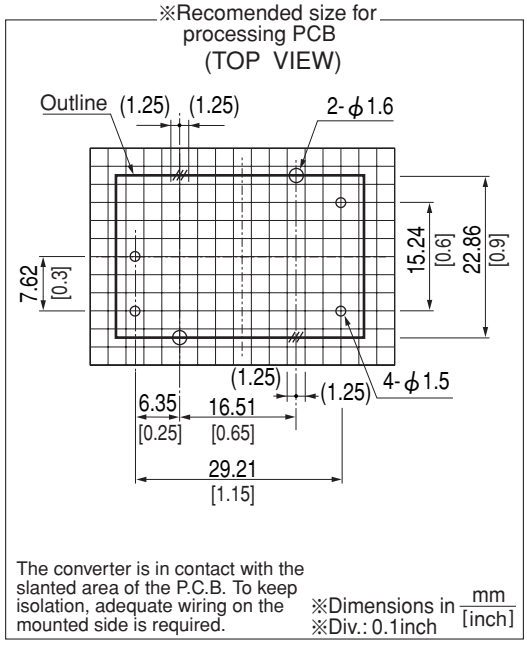
	MODEL	ZUS30505	ZUS30512	ZUS30515	ZUS31205	ZUS31212	ZUS31215	ZUS32405	ZUS32412	ZUS32415	ZUS34805	ZUS34812	ZUS34815
INPUT	VOLTAGE[V]	DC4.5 - 9			DC9 - 18			DC18 - 36			DC36 - 72		
	CURRENT[A] *1	0.896typ	0.857typ	0.857typ	0.357typ	0.338typ	0.338typ	0.176typ	0.167typ	0.167typ	0.088typ	0.082typ	0.082typ
	EFFICIENCY[%] *1	67typ	70typ	70typ	70typ	74typ	74typ	71typ	75typ	75typ	71typ	76typ	76typ
OUTPUT	VOLTAGE[V]	5	12	15	5	12	15	5	12	15	5	12	15
	CURRENT[A]	0.60	0.25	0.20	0.60	0.25	0.20	0.60	0.25	0.20	0.60	0.25	0.20
	LINE REGULATION[mV]	20max	48max	60max	20max	48max	60max	20max	48max	60max	20max	48max	60max
	LOAD REGULATION[mV]	40max	100max	120max	40max	100max	120max	40max	100max	120max	40max	100max	120max
	RIPPLE[mVp-p] *2	80max	120max	120max	80max	120max	120max	80max	120max	120max	80max	120max	120max
	RIPPLE NOISE[mVp-p] *2	120max	150max	150max	120max	150max	150max	120max	150max	150max	120max	150max	150max
	TEMPERATURE REGULATION[mV] -20 to +55℃	50max	150max	180max	50max	150max	180max	50max	150max	180max	50max	150max	180max
	DRIFT[mV] *3	20max	48max	60max	20max	48max	60max	20max	48max	60max	20max	48max	60max
	START-UP TIME[ms]	20max (Minimum input, Io=100%)											
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed											
	OUTPUT VOLTAGE SETTING[V]	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75
PROTECTION CIRCUIT	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically											
ISOLATION	INPUT-OUTPUT	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)											
	INPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)											
	OUTPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)											
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-20 to +71℃, 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max											
	STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +85℃, 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 X, Y and Z axis											
SAFETY	AGENCY APPROVALS	UL60950-1, EN60950-1, CSA C22.2 No.60950-1 Complies with IEC60950-1											
OTHERS	CASE SIZE/WEIGHT	35×7×23mm (W×H×D) / 16g max											
	COOLING METHOD	Convection											

*1 Rated input. 5V, 12V, 24V or 48V DC, Io=100%
*2 Measured by 20MHz oscilloscope.
*3 The drift is a change at 25℃ of ambient temperature and 30 minutes - 8 hours after the input voltage applied at rated input/output.
* Series/Parallel operation with other model is not possible.

External view



※Weight: 16g or less.
※Tolerance: ± 0.5
※Case material: Brass

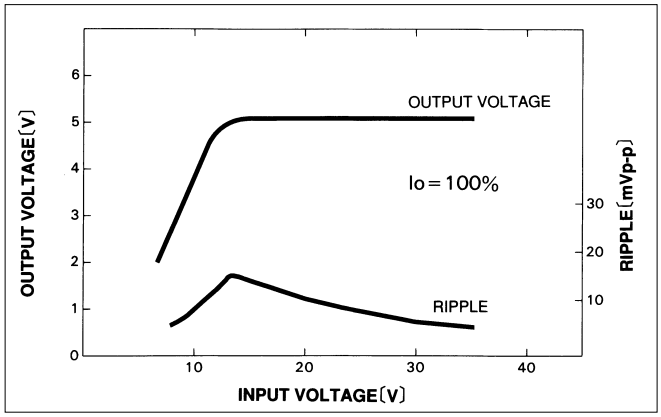


The converter is in contact with the slanted area of the P.C.B. To keep isolation, adequate wiring on the mounted side is required.

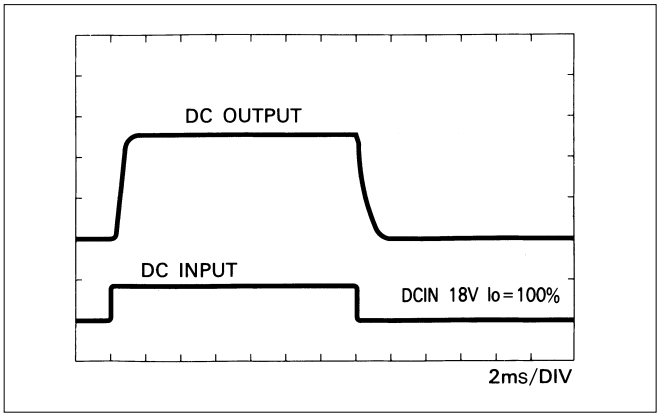
※Dimensions in mm [inch]
※Div.: 0.1inch

Performance data

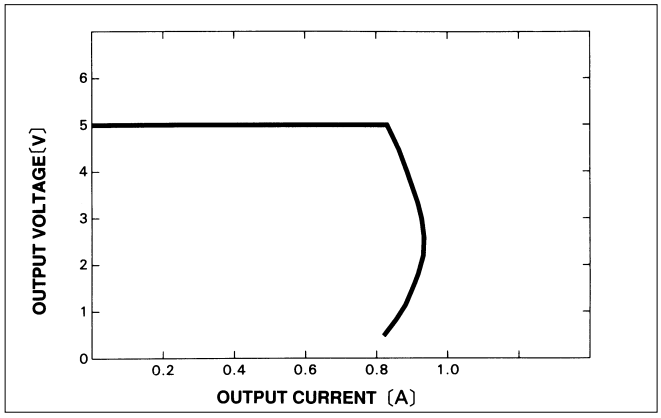
■STATIC CHARACTERISTICS (ZUS32405)



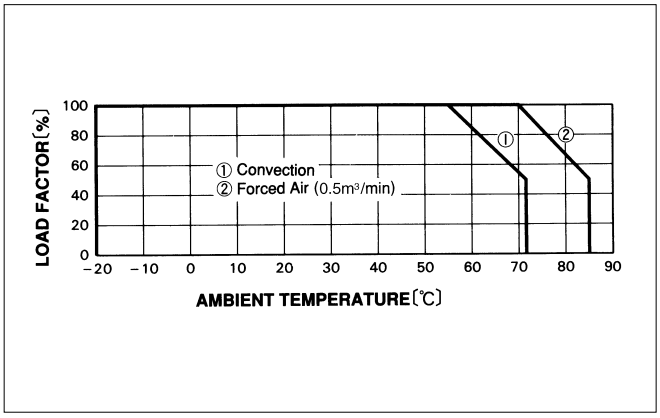
■RISE TIME & FALL TIME (ZUS32405)



■OVERCURRENT CHARACTERISTICS (ZUS32405)



■DERATING CURVE



COSEL DC-DC Converters PCB Mount type

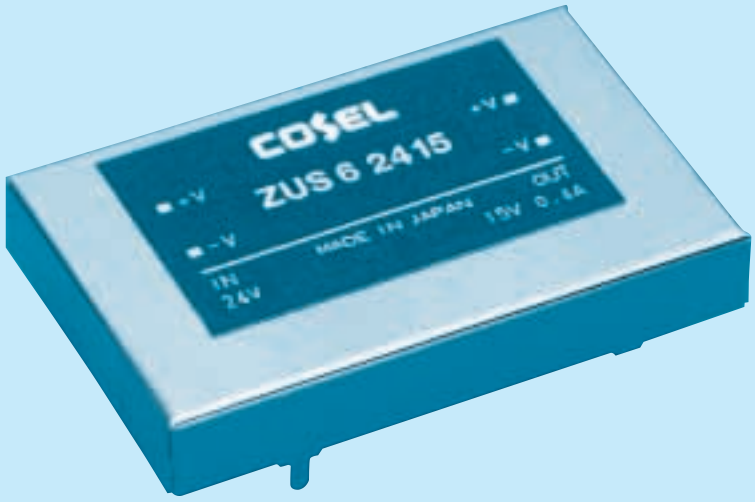
ZUS6

Ordering information

ZU	S	6	12	05	
①	②	③	④	⑤	

①Series name
②Single output
③Output wattage
④Input voltage
⑤Output voltage

RoHS



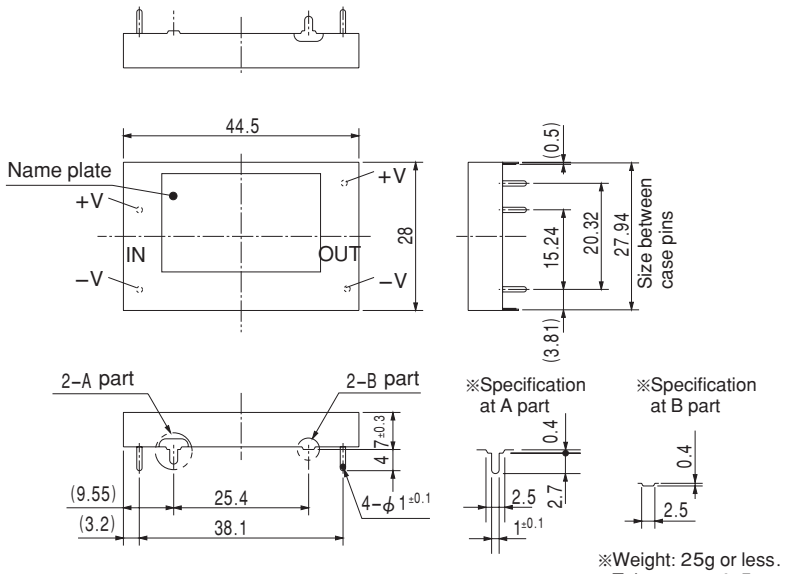
MODEL		ZUS6053R3	ZUS60505	ZUS60512	ZUS60515	ZUS61205	ZUS61212	ZUS61215	ZUS62405	ZUS62412	ZUS62415	ZUS6483R3	ZUS64805	ZUS64812	ZUS64815
MAX OUTPUT WATTAGE[W]		3.3	5	6	6	6	6	6	6	6	6	3.96	6	6	6
DC OUTPUT	VOLTAGE[V]	3.3	5	12	15	5	12	15	5	12	15	3.3	5	12	15
	CURRENT[A]	1.0	1.0	0.5	0.4	1.2	0.5	0.4	1.2	0.5	0.4	1.2	1.2	0.5	0.4

SPECIFICATIONS

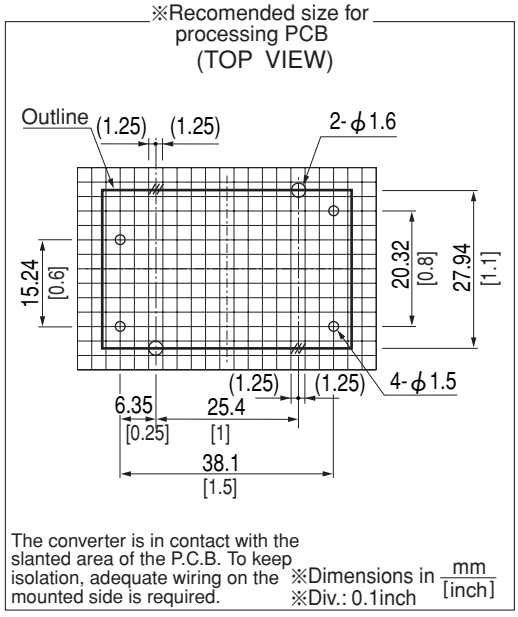
	MODEL	ZUS6053R3	ZUS60505	ZUS60512	ZUS60515	ZUS61205	ZUS61212	ZUS61215	ZUS62405	ZUS62412	ZUS62415	ZUS6483R3	ZUS64805	ZUS64812	ZUS64815
INPUT	VOLTAGE[V]	DC4.5 - 9				DC9 - 18			DC18 - 36			DC36 - 72			
	CURRENT[A] *1	0.94typ	1.41typ	1.63typ	1.63typ	0.69typ	0.65typ	0.65typ	0.35typ	0.33typ	0.33typ	0.09typ	0.18typ	0.17typ	0.17typ
	EFFICIENCY[%] *1	70typ	71typ	74typ	74typ	73typ	78typ	78typ	73typ	78typ	78typ	73typ	73typ	78typ	78typ
OUTPUT	VOLTAGE[V]	3.3	5	12	15	5	12	15	5	12	15	3.3	5	12	15
	CURRENT[A]	1.0	1.0	0.5	0.4	1.2	0.5	0.4	1.2	0.5	0.4	1.2	1.2	0.5	0.4
	LINE REGULATION[mV]	20max	20max	48max	60max	20max	48max	60max	20max	48max	60max	20max	20max	48max	60max
	LOAD REGULATION[mV]	40max	40max	100max	120max	40max	100max	120max	40max	100max	120max	40max	40max	100max	120max
	RIPPLE[mVp-p] *2	80max	80max	120max	120max	80max	120max	120max	80max	120max	120max	80max	80max	120max	120max
	RIPPLE NOISE[mVp-p] *2	120max	120max	150max	150max	120max	150max	150max	120max	150max	150max	120max	120max	150max	150max
	TEMPERATURE REGULATION[mV] -20 to +55℃	50max	50max	150max	180max	50max	150max	180max	50max	150max	180max	50max	50max	150max	180max
	DRIFT[mV] *3	20max	20max	48max	60max	20max	48max	60max	20max	48max	60max	20max	20max	48max	60max
	START-UP TIME[ms]	20max (Minimum input, Io=100%)													
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed													
	OUTPUT VOLTAGE SETTING[V]	3.20 - 3.47	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	3.20 - 3.47	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75
PROTECTION CIRCUIT	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically													
ISOLATION	INPUT-OUTPUT	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)													
	INPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)													
	OUTPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)													
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-20 to +71℃, 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max													
	STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +85℃, 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 X, Y and Z axis													
SAFETY	AGENCY APPROVALS	UL60950-1, EN60950-1, CSA C22.2 No.60950-1 Complies with IEC60950-1													
OTHERS	CASE SIZE/WEIGHT	44.5×7×28mm (W×H×D) / 25g max													
	COOLING METHOD	Convection													

*1 Rated input. 5V, 12V, 24V or 48V DC, Io=100%
*2 Measured by 20MHz oscilloscope.
*3 The drift is a change at 25℃ of ambient temperature and 30 minutes - 8 hours after the input voltage applied at rated input/output.
* Series/Parallel operation with other model is not possible.

External view



※Weight: 25g or less.
※Tolerance: ± 0.5
※Case material: Brass

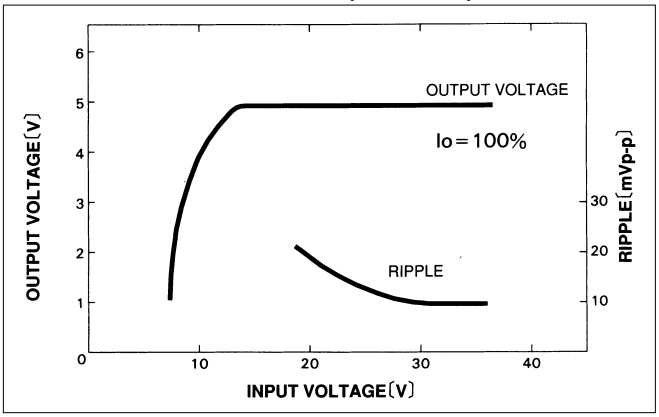


The converter is in contact with the slanted area of the P.C.B. To keep isolation, adequate wiring on the mounted side is required.

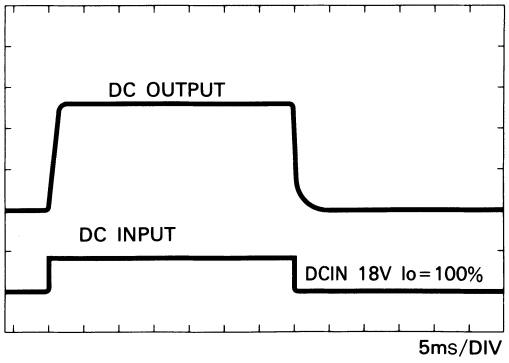
※Dimensions in mm [inch]
※Div.: 0.1inch

Performance data

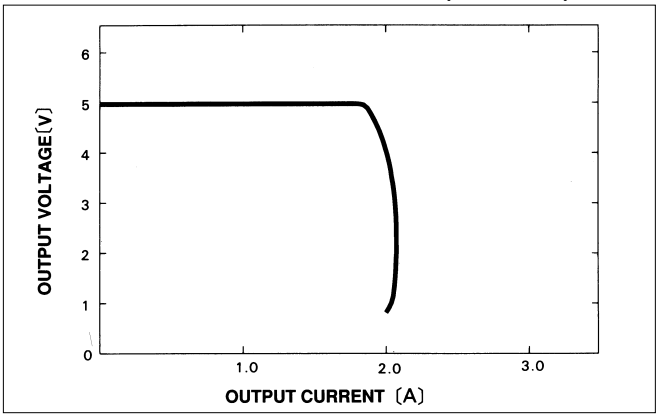
■STATIC CHARACTERISTICS (ZUS62405)



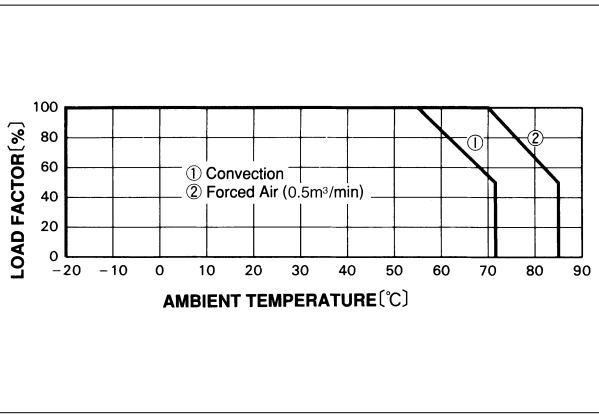
■RISE TIME & FALL TIME (ZUS62405)



■OVERCURRENT CHARACTERISTICS (ZUS62405)



■DERATING CURVE



COSEL DC-DC Converters PCB Mount type

ZUS10

Ordering information

ZU	S	10	12	05	
①	②	③	④	⑤	

①Series name
②Single output
③Output wattage
④Input voltage
⑤Output voltage

RoHS

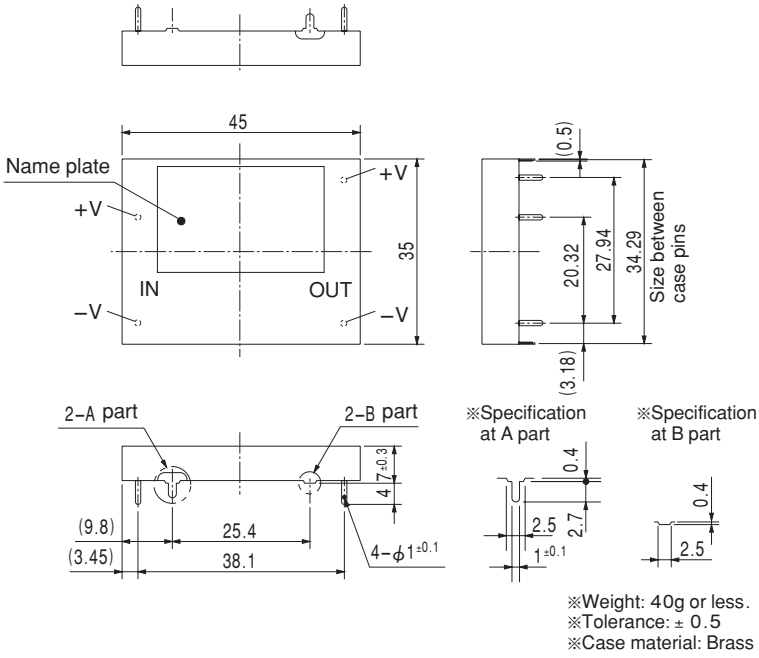
MODEL		ZUS10053R3	ZUS100505	ZUS100512	ZUS100515	ZUS101205	ZUS101212	ZUS101215	ZUS102405	ZUS102412	ZUS102415	ZUS10483R3	ZUS104805	ZUS104812	ZUS104815
MAX OUTPUT WATTAGE[W]		5.28	8.0	8.4	9.0	10.0	10.8	10.5	10.0	10.8	10.5	6.6	10.0	10.8	10.5
DC OUTPUT	VOLTAGE[V]	3.3	5	12	15	5	12	15	5	12	15	3.3	5	12	15
	CURRENT[A]	1.6	1.6	0.7	0.6	2.0	0.9	0.7	2.0	0.9	0.7	2.0	2.0	0.9	0.7

SPECIFICATIONS

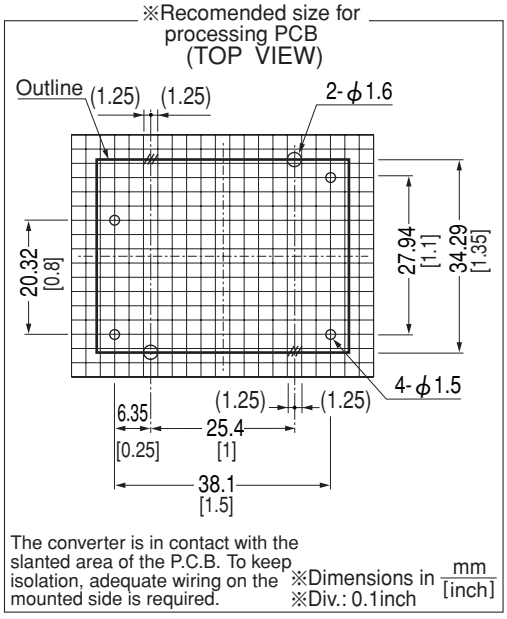
	MODEL	ZUS10053R3	ZUS100505	ZUS100512	ZUS100515	ZUS101205	ZUS101212	ZUS101215	ZUS102405	ZUS102412	ZUS102415	ZUS10483R3	ZUS104805	ZUS104812	ZUS104815
INPUT	VOLTAGE[V]	DC4.5 - 9				DC9 - 18			DC18 - 36			DC36 - 72			
	CURRENT[A] *1	1.48typ	2.14typ	2.24typ	2.40typ	1.05typ	1.10typ	1.07typ	0.53typ	0.55typ	0.54typ	0.18typ	0.27typ	0.28typ	0.27typ
	EFFICIENCY[%] *1	72typ	75typ	75typ	75typ	80typ	82typ	82typ	80typ	82typ	82typ	75typ	80typ	82typ	82typ
OUTPUT	VOLTAGE[V]	3.3	5	12	15	5	12	15	5	12	15	3.3	5	12	15
	CURRENT[A]	1.6	1.6	0.7	0.6	2.0	0.9	0.7	2.0	0.9	0.7	2.0	2.0	0.9	0.7
	LINE REGULATION[mV]	20max	20max	48max	60max	20max	48max	60max	20max	48max	60max	20max	20max	48max	60max
	LOAD REGULATION[mV]	40max	40max	100max	120max	40max	100max	120max	40max	100max	120max	40max	40max	100max	120max
	RIPPLE[mVp-p] *2	80max	80max	120max	120max	80max	120max	120max	80max	120max	120max	80max	80max	120max	120max
	RIPPLE NOISE[mVp-p] *2	120max	120max	150max	150max	120max	150max	150max	120max	150max	150max	120max	120max	150max	150max
	TEMPERATURE REGULATION[mV] -20 to +55℃	50max	50max	150max	180max	50max	150max	180max	50max	150max	180max	50max	50max	150max	180max
	DRIFT[mV] *3	20max	20max	48max	60max	20max	48max	60max	20max	48max	60max	20max	20max	48max	60max
	START-UP TIME[ms]	20max (Minimum input, Io=100%)													
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed													
	OUTPUT VOLTAGE SETTING[V]	3.20 - 3.47	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75	3.20 - 3.47	4.85 - 5.25	11.40 - 12.60	14.25 - 15.75
PROTECTION CIRCUIT	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically													
ISOLATION	INPUT-OUTPUT	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)													
	INPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)													
	OUTPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)													
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-20 to +71℃, 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max													
	STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +85℃, 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 X, Y and Z axis													
SAFETY	AGENCY APPROVALS	UL60950-1, EN60950-1, CSA C22.2 No.60950-1 Complies with IEC60950-1													
OTHERS	CASE SIZE/WEIGHT	45×7×35mm (W×H×D) / 40g max													
	COOLING METHOD	Convection													

*1 Rated input. 5V, 12V, 24V or 48V DC, Io=100%
*2 Measured by 20MHz oscilloscope.
*3 The drift is a change at 25℃ of ambient temperature and 30 minutes - 8 hours after the input voltage applied at rated input/output.
* Series/Parallel operation with other model is not possible.

External view



※Weight: 40g or less.
※Tolerance: ± 0.5
※Case material: Brass

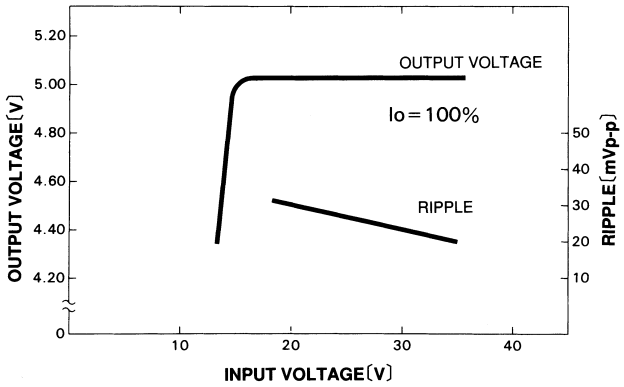


The converter is in contact with the slanted area of the P.C.B. To keep isolation, adequate wiring on the mounted side is required.

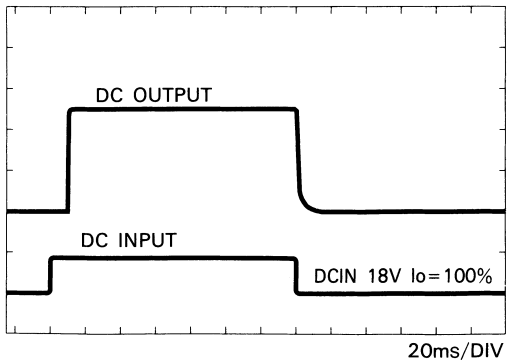
※Dimensions in mm [inch]
※Div.: 0.1inch

Performance data

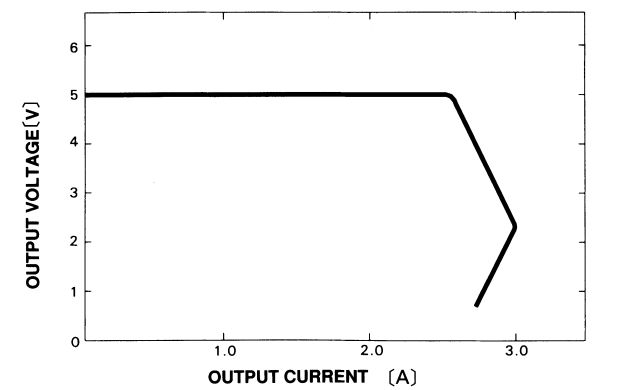
■STATIC CHARACTERISTICS (ZUS102405)



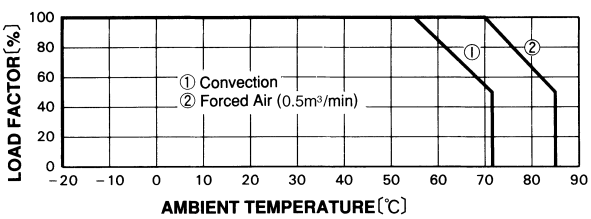
■RISE TIME & FALL TIME (ZUS102405)



■OVERCURRENT CHARACTERISTICS (ZUS102405)



■DERATING CURVE



COSEL DC-DC Converters PCB Mount type

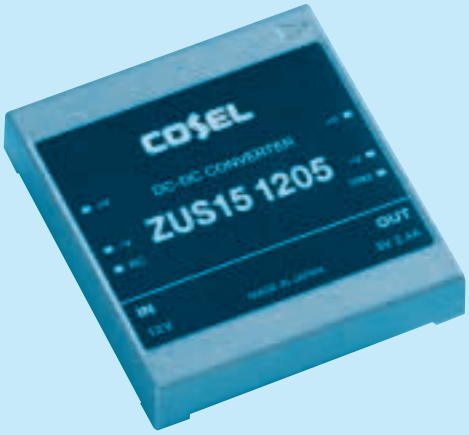
ZUS15

Ordering information

ZU	S	15	12	05	
①	②	③	④	⑤	

①Series name
②Single output
③Output wattage
④Input voltage
⑤Output voltage

RoHS



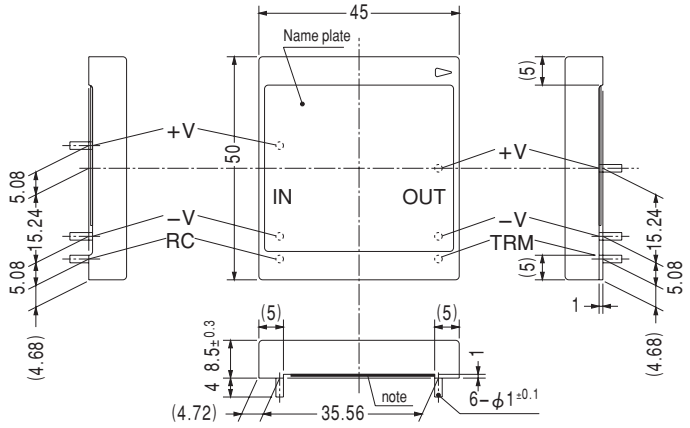
MODEL		ZUS15053R3	ZUS150505	ZUS150512	ZUS151205	ZUS151212	ZUS152405	ZUS152412	ZUS15483R3	ZUS154805	ZUS154812
MAX OUTPUT WATTAGE[W]		6.6	10.0	12.0	12.0	15.6	12.0	15.6	7.92	12.0	15.6
DC OUTPUT	VOLTAGE[V]	3.3	5	12	5	12	5	12	3.3	5	12
	CURRENT[A]	2.0	2.0	1.0	2.4	1.3	2.4	1.3	2.4	2.4	1.3

SPECIFICATIONS

	MODEL	ZUS15053R3	ZUS150505	ZUS150512	ZUS151205	ZUS151212	ZUS152405	ZUS152412	ZUS15483R3	ZUS154805	ZUS154812
INPUT	VOLTAGE[V]	DC4.5 - 9			DC9 - 18		DC18 - 36		DC36 - 75		
	CURRENT[A] *1	1.83typ	2.50typ	2.96typ	1.25typ	1.57typ	0.63typ	0.78typ	0.21typ	0.31typ	0.39typ
	EFFICIENCY[%] *1	72typ	80typ	81typ	80typ	83typ	80typ	83typ	78typ	80typ	83typ
OUTPUT	VOLTAGE[V]	3.3	5	12	5	12	5	12	3.3	5	12
	CURRENT[A]	2.0	2.0	1.0	2.4	1.3	2.4	1.3	2.4	2.4	1.3
	LINE REGULATION[mV]	20max	20max	48max	20max	48max	20max	48max	20max	20max	48max
	LOAD REGULATION[mV]	40max	40max	100max	40max	100max	40max	100max	40max	40max	100max
	RIPPLE[mVp-p] *2	80max	80max	120max	80max	120max	80max	120max	80max	80max	120max
	RIPPLE NOISE[mVp-p] *2	120max	120max	150max	120max	150max	120max	150max	120max	120max	150max
	TEMPERATURE REGULATION[mV] 0 to +55℃	50max	50max	150max	50max	150max	50max	150max	50max	50max	150max
	DRIFT[mV] *3	20max	20max	48max	20max	48max	20max	48max	20max	20max	48max
	START-UP TIME[ms]	100max (Minimum input, Io=100%)									
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Internally fixed (TRM pin open), adjustable by external VR									
		3.20 - 3.47	±5%						3.20 - 3.47	±5%	
	OUTPUT VOLTAGE SETTING[V]	3.20 - 3.47	4.85 - 5.25	11.4 - 12.6	4.85 - 5.25	11.4 - 12.6	4.85 - 5.25	11.4 - 12.6	3.20 - 3.47	4.85 - 5.25	11.4 - 12.6
PROTECTION CIRCUIT	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically									
	OVERVOLTAGE PROTECTION	4.0 - 5.25V	Works at 115 - 140% of rating						4.0 - 5.25V	Works at 115 - 140% of rating	
	REMOTE ON/OFF	Between RC and -side of input:short - 1.2V ・・・output ON, 2.4V - 5.5V(or open) ・・・output OFF, Compatible to TTL									
ISOLATION	INPUT-OUTPUT	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)									
	INPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)									
	OUTPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)									
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-20 to +71℃, 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max									
	STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +85℃, 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 X, Y and Z axis									
SAFETY	AGENCY APPROVALS	UL60950-1, EN60950-1, CSA C22.2 No.60950-1 Complies with IEC60950-1									
OTHERS	CASE SIZE/WEIGHT	45×8.5×50mm (W×H×D) / 55g max									
	COOLING METHOD	Convection									

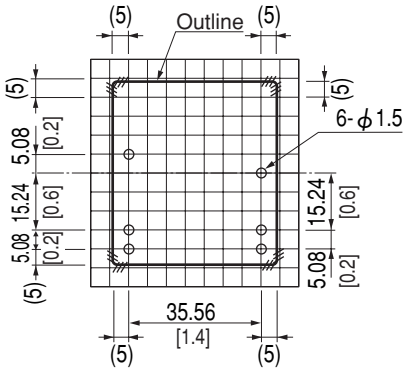
*1 Rated input. 5V, 12V, 24V or 48V DC, Io=100%
*2 Measured by 20MHz oscilloscope.
*3 The drift is a change at 25℃ of ambient temperature and 30 minutes - 8 hours after the input voltage applied at rated input/output.
* Series/Parallel operation with other model is not possible.

External view



note) Internal parts
※Weight: 55g or less.
※Tolerance: ± 0.5
※Case material: Aluminum

※Recomended size for processing PCB
(TOP VIEW)

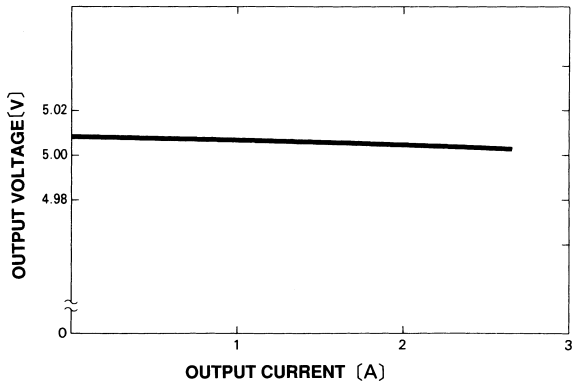


The converter is in contact with the slanted area of the P.C.B. To keep isolation, adequate wiring on the mounted side is required.

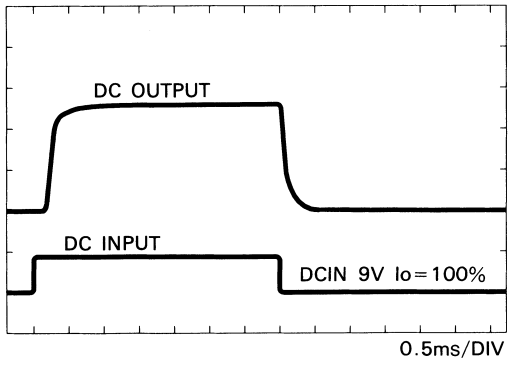
※Dimensions in mm [inch]
※Div.: 0.2inch

Performance data

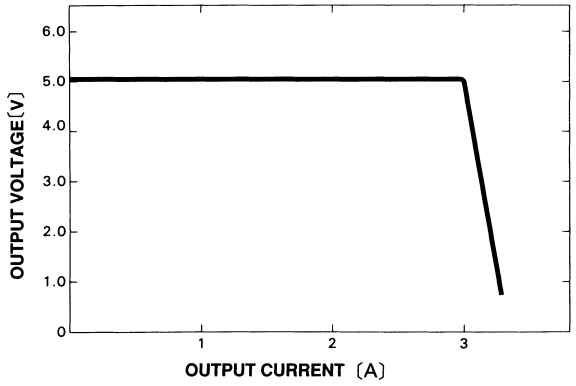
■STATIC CHARACTERISTICS (ZUS151205)



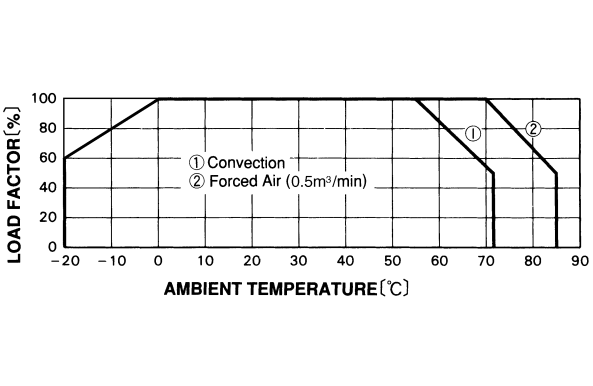
■RISE TIME & FALL TIME (ZUS151205)



■OVERCURRENT CHARACTERISTICS (ZUS151205)



■DERATING CURVE



COSEL DC-DC Converters PCB Mount type

ZUS25

Ordering information

ZU	S	25	12	05	
①	②	③	④	⑤	

①Series name
②Single output
③Output wattage
④Input voltage
⑤Output voltage

RoHS

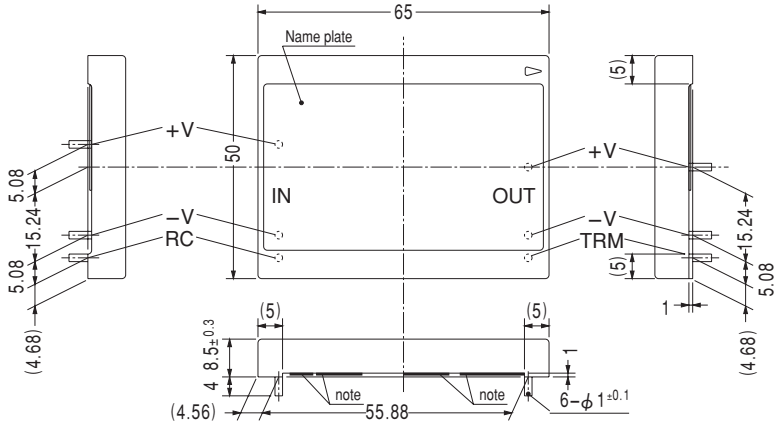
MODEL		ZUS25053R3	ZUS250505	ZUS250512	ZUS251205	ZUS251212	ZUS252405	ZUS252412	ZUS25483R3	ZUS254805	ZUS254812
MAX OUTPUT WATTAGE[W]		13.2	16.0	20.4	20.0	25.2	20.0	25.2	13.2	20.0	25.2
DC OUTPUT	VOLTAGE[V]	3.3	5	12	5	12	5	12	3.3	5	12
	CURRENT[A]	4.0	3.2	1.7	4.0	2.1	4.0	2.1	4.0	4.0	2.1

SPECIFICATIONS

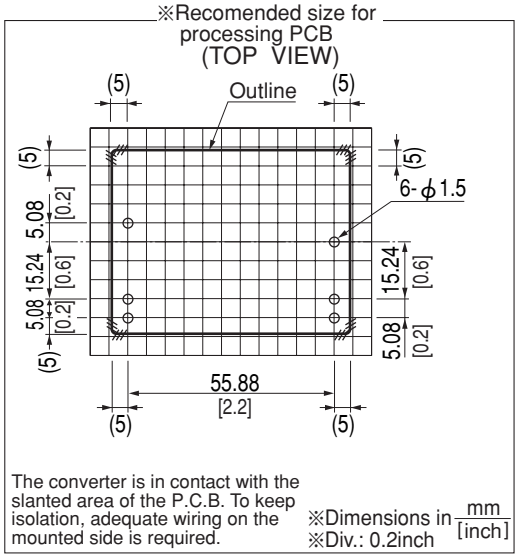
	MODEL	ZUS25053R3	ZUS250505	ZUS250512	ZUS251205	ZUS251212	ZUS252405	ZUS252412	ZUS25483R3	ZUS254805	ZUS254812
INPUT	VOLTAGE[V]	DC4.5 - 9			DC9 - 18		DC18 - 36		DC36 - 75		
	CURRENT[A] *1	3.66typ	4.00typ	4.98typ	2.03typ	2.47typ	1.02typ	1.23typ	0.35typ	0.51typ	0.62typ
	EFFICIENCY[%] *1	72typ	80typ	82typ	82typ	85typ	82typ	85typ	78typ	82typ	85typ
OUTPUT	VOLTAGE[V]	3.3	5	12	5	12	5	12	3.3	5	12
	CURRENT[A]	4.0	3.2	1.7	4.0	2.1	4.0	2.1	4.0	4.0	2.1
	LINE REGULATION[mV]	20max	20max	48max	20max	48max	20max	48max	20max	20max	48max
	LOAD REGULATION[mV]	40max	40max	100max	40max	100max	40max	100max	40max	40max	100max
	RIPPLE[mVp-p] *2	80max	80max	120max	80max	120max	80max	120max	80max	80max	120max
	RIPPLE NOISE[mVp-p] *2	120max	120max	150max	120max	150max	120max	150max	120max	120max	150max
	TEMPERATURE REGULATION[mV] 0 to +55℃	50max	50max	150max	50max	150max	50max	150max	50max	50max	150max
	DRIFT[mV] *3	20max	20max	48max	20max	48max	20max	48max	20max	20max	48max
	START-UP TIME[ms]	100max (Minimum input, Io=100%)									
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Internally fixed (TRM pin open), adjustable by external VR									
		3.20 - 3.47	±5%						3.20 - 3.47	±5%	
	OUTPUT VOLTAGE SETTING[V]	3.20 - 3.47	4.85 - 5.25	11.4 - 12.6	4.85 - 5.25	11.4 - 12.6	4.85 - 5.25	11.4 - 12.6	3.20 - 3.47	4.85 - 5.25	11.4 - 12.6
PROTECTION CIRCUIT	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically									
	OVERVOLTAGE PROTECTION	4.0 - 5.25V	Works at 115 - 140% of rating						4.0 - 5.25V	Works at 115 - 140% of rating	
	REMOTE ON/OFF	Between RC and -side of input:short - 1.2V ・・・output ON, 2.4V - 5.5V(or open) ・・・output OFF, Compatible to TTL									
ISOLATION	INPUT-OUTPUT	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)									
	INPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)									
	OUTPUT-CASE	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)									
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-20 to +71℃, 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max									
	STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +85℃, 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 X, Y and Z axis									
SAFETY	AGENCY APPROVALS	UL60950-1, EN60950-1, CSA C22.2 No.60950-1 Complies with IEC60950-1									
OTHERS	CASE SIZE/WEIGHT	65×8.5×50mm (W×H×D) / 65g max									
	COOLING METHOD	Convection									

*1 Rated input. 5V, 12V, 24V or 48V DC, Io=100%
*2 Measured by 20MHz oscilloscope.
*3 The drift is a change at 25℃ of ambient temperature and 30 minutes - 8 hours after the input voltage applied at rated input/output.
* Series/Parallel operation with other model is not possible.

External view



note) Internal parts
※Weight: 65g or less.
※Tolerance: ± 0.5
※Case material: Aluminum

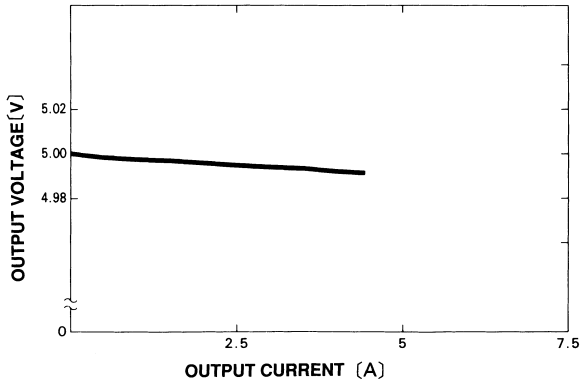


The converter is in contact with the slanted area of the P.C.B. To keep isolation, adequate wiring on the mounted side is required.

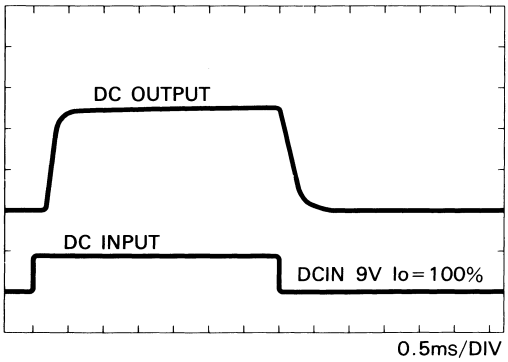
※Dimensions in mm [inch]
※Div.: 0.2inch

Performance data

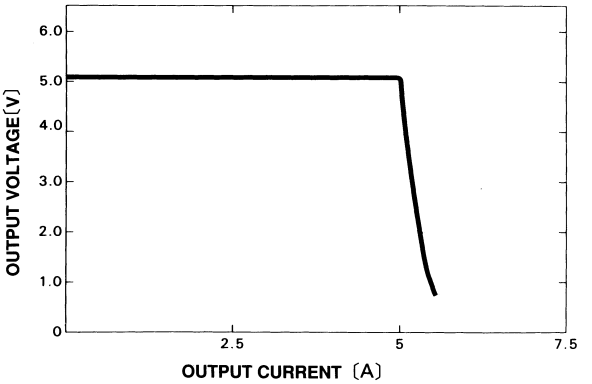
■STATIC CHARACTERISTICS (ZUS251205)



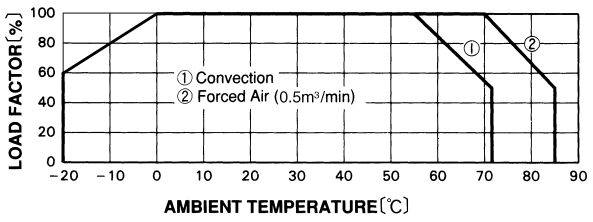
■RISE TIME & FALL TIME (ZUS251205)



■OVERCURRENT CHARACTERISTICS (ZUS251205)



■DERATING CURVE



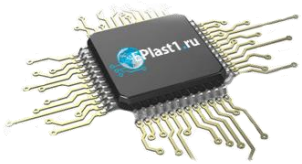
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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.