ZUS6

Features

UL recognized, TV approved, CSA certified
Isolated between input-output
Thin profile
Built-in Over Current Protection
RoHS Compliant

5 year warranty(refer to Instruction Manual)

Model	Input Voltage [V]	Output Wattage [W]	DC Output [V/A]
ZUS6053R3	DC 4.5 - 9	3.3	3.3V 1A
ZUS60505	DC 4.5 - 9	5	5V 1A
ZUS60512	DC 4.5 - 9	6	12V 0.5A
ZUS60515	DC 4.5 - 9	6	15V 0.4A
ZUS61205	DC 9 - 18	6	5V 1.2A
ZUS61212	DC 9 - 18	6	12V 0.5A
ZUS61215	DC 9 - 18	6	15V 0.4A
ZUS62405	DC 18 - 36	6	5V 1.2A
ZUS62412	DC 18 - 36	6	12V 0.5A
ZUS62415	DC 18 - 36	6	15V 0.4A
ZUS6483R3	DC 36 - 72	3.3	3.3V 1A
ZUS64805	DC 36 - 72	6	5V 1.2A
ZUS64812	DC 36 - 72	6	12V 0.5A
ZUS64815	DC 36 - 72	6	15V 0.4A

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

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	3.3	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	1.0	1.2	0.5	0.4

SPECIFICATIONS

ZU/ZT

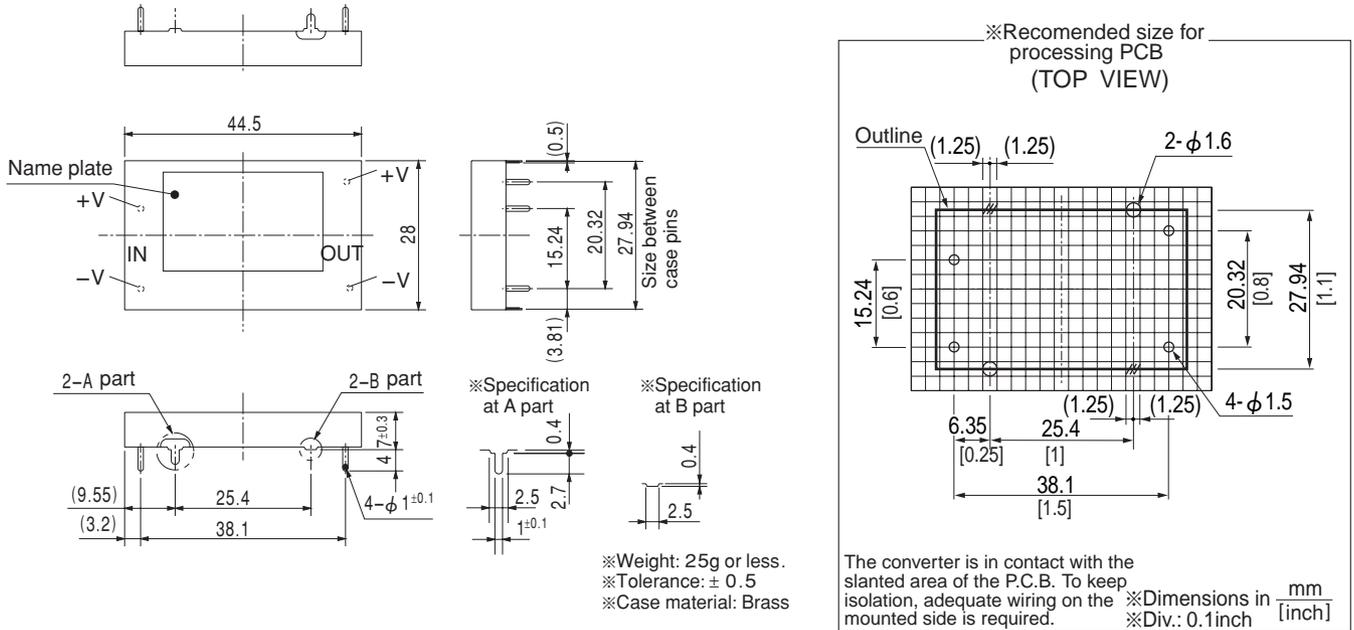|	MODEL	ZUS6053R3	ZUS60505	ZUS60512	ZUS60515	ZUS61205	ZUS61212	ZUS61215	ZUS62405	ZUS62412	ZUS62415	ZUS6483R3	ZUS64805	ZUS64812	ZUS64815
INPUT	VOLTAGE[V]	DC4.5 - 9				DC9 - 18			DC18 - 36			DC36 - 72			
	CURRENT[A] *1	0.94typ	1.41typ	1.63typ	1.63typ	0.69typ	0.65typ	0.65typ	0.35typ	0.33typ	0.33typ	0.09typ	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	1.0	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.950 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.
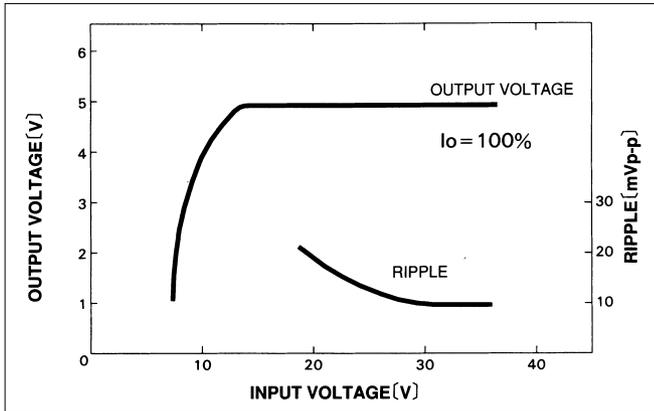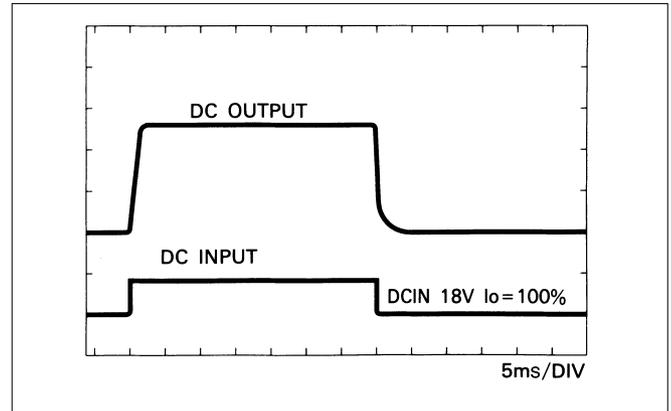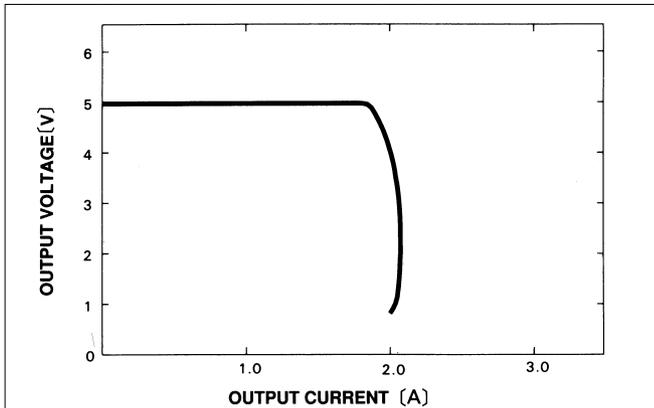* Series/Parallel operation with other model is not possible.

External view

Name plate
+V
IN   OUT
−V

44.5
28

+V
+V
−V
−V

(0.5)
15.24
20.32
27.94
(3.81)
Size between case pins

2−A part   2−B part

(9.55)
(3.2)
25.4
38.1
4−φ1±0.1
4.7±0.3

※Specification at A part
0.4
2.5
2.7
1±0.1

※Specification at B part
0.4
2.5

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

※Recomended size for processing PCB
(TOP VIEW)

Outline (1.25) (1.25)
2-φ1.6
15.24 [0.6]
20.32 [0.8]
27.94 [1.1]
(1.25) (1.25)
4-φ1.5
6.35 [0.25]
25.4 [1]
38.1 [1.5]

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)

OUTPUT VOLTAGE
Io = 100%
RIPPLE

OUTPUT VOLTAGE [V]
RIPPLE [mVp-p]
INPUT VOLTAGE [V]

■RISE TIME & FALL TIME (ZUS62405)

DC OUTPUT
DC INPUT
DCIN 18V Io = 100%
5ms/DIV

■OVERCURRENT CHARACTERISTICS (ZUS62405)

OUTPUT VOLTAGE [V]
OUTPUT CURRENT [A]

■DERATING CURVE

① Convection
② Forced Air (0.5m³/min)

LOAD FACTOR [%]
AMBIENT TEMPERATURE [℃]

ZU/ZT