

CDS40048

CD S 400 48 12 - □

① ② ③ ④ ⑤ ⑥



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Input voltage
48:DC36 - 76V
- ⑤ Output voltage
- ⑥ Optional
M:with Mounting hole
M3 tapped

MODEL	CDS4004802	CDS4004803	CDS4004805	CDS4004807	CDS4004812	CDS4004815	CDS4004824	CDS4004828
MAX OUTPUT WATTAGE[W]	200	330	400	405	500	510	504	504
DC OUTPUT	2V 100A	3.3V 100A	5V 80A	7.5V 54A	12.5V 40A	15V 34A	24V 21A	28V 18A

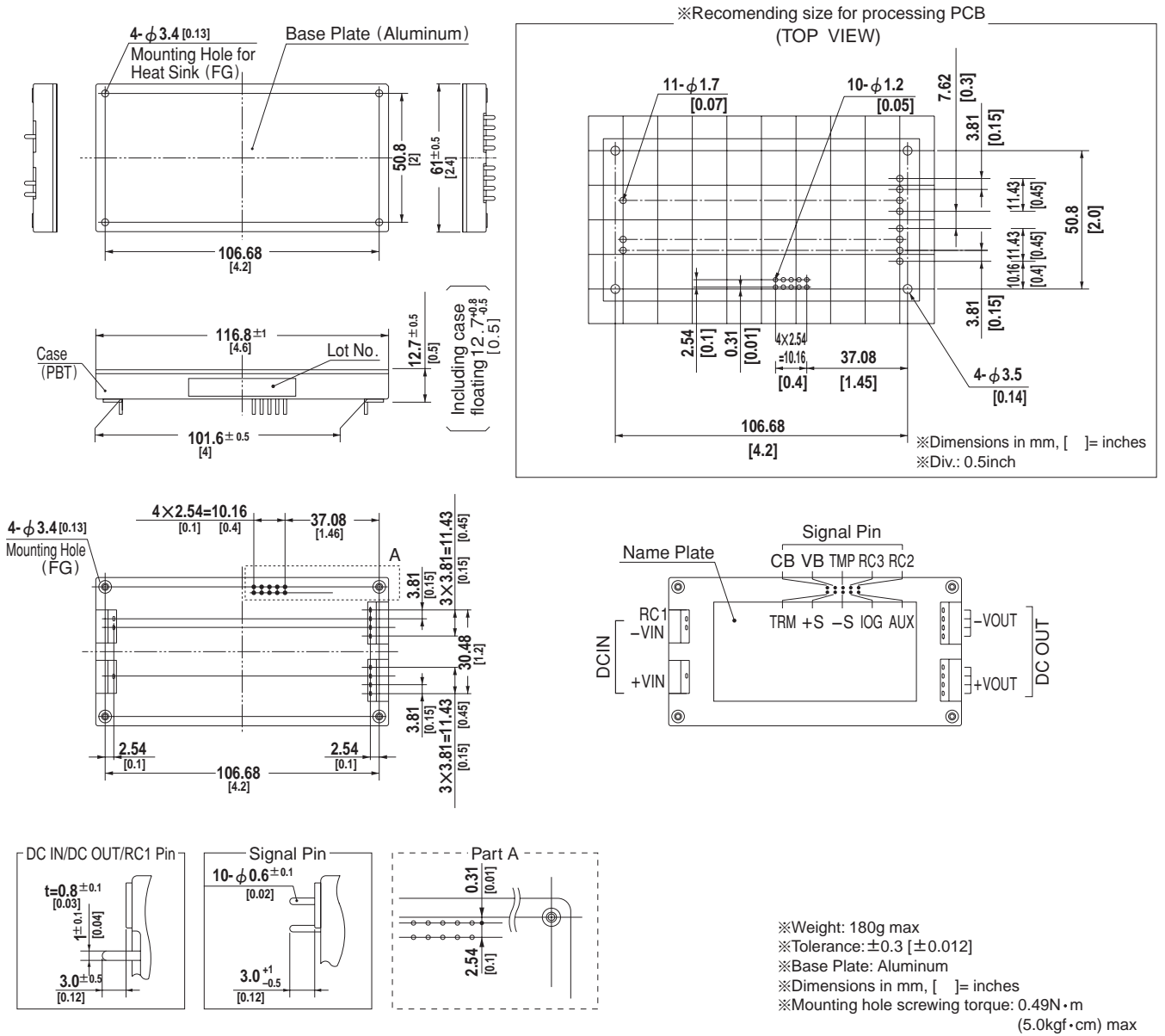
SPECIFICATIONS

	MODEL	CDS4004802	CDS4004803	CDS4004805	CDS4004807	CDS4004812	CDS4004815	CDS4004824	CDS4004828	
INPUT	VOLTAGE[V]	DC36 - 76								
	CURRENT[A]	*1 6typ	9typ	10typ	10typ	12typ	12typ	12typ	12typ	
	EFFICIENCY[%]	DCIN 48V, Io=100%	73typ	80typ	84typ	87typ	89typ	89typ	89typ	89typ
DCIN 48V, Io=50%		75typ	82typ	86typ	88typ	91typ	90typ	90typ	90typ	
OUTPUT	VOLTAGE[V]	2	3.3	5	7.5	12.5	15	24	28	
	CURRENT[A]	100	100	80	54	40	34	21	18	
	LINE REGULATION[mV]	10max	16max	20max	30max	40max	60max	95max	95max	
	LOAD REGULATION[mV]	20max	30max	40max	60max	100max	150max	190max	190max	
	RIPPLE[mVp-p]	0 to +85°C *2	80max	80max	80max	100max	120max	120max	120max	120max
		-20 - 0°C *2	140max	140max	140max	150max	160max	160max	160max	160max
	RIPPLE NOISE[mVp-p]	0 to +85°C *2	100max	100max	100max	140max	150max	150max	150max	150max
		-20 - 0°C *2	150max	150max	150max	160max	180max	180max	180max	180max
	TEMPERATURE REGULATION[mV]	0 to +65°C	25max	35max	50max	75max	120max	180max	280max	280max
		-20 to +85°C	40max	60max	85max	130max	200max	310max	480max	480max
DRIFT[mV]	*3 10max	16max	20max	30max	40max	60max	90max	90max		
START-UP TIME[ms]	200max (DCIN 48V, Io=100%)									
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed (TRM pin open), 60 - 110% adjustable by external VR or external voltage									
	1.0 - 2.2 *4	1.98 - 3.63	3.0 - 5.5	4.50 - 8.25	7.50 - 13.75	9.0 - 16.5	14.4 - 26.4	16.8 - 32.0 *5		
OUTPUT VOLTAGE SETTING[V]	1.95 - 2.10	3.25 - 3.45	4.90 - 5.20	7.25 - 7.85	12.00 - 13.00	14.40 - 15.60	23.04 - 24.96	26.88 - 29.12		
OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically									
OVERVOLTAGE PROTECTION[V]	2.80 - 4.50	4.00 - 5.50	5.75 - 7.00	8.60 - 10.50	14.35 - 17.50	17.25 - 21.00	27.60 - 33.60	33.00 - 39.20		
REMOTE SENSING	Provided									
REMOTE ON/OFF	Provided (On both side of input and output)									
INPUT-OUTPUT	DC1500V 1minute, DC500V 50MΩ min (20±15°C)									
INPUT-FG	DC1500V 1minute, DC500V 50MΩ min (20±15°C)									
OUTPUT-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C)									
OUTPUT-RC2,RC3	AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (20±15°C)									
OPERATING TEMP.,HUMID.AND ALTITUDE *6	-20 to +85°C (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max									
STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +85°C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max									
VIBRATION	10 - 55Hz, 49.0m/s ² (5G) 3minutes period, 60minutes each along X, Y and Z axis									
IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis									
SAFETY	AGENCY APPROVALS	UL60950-1, C-UL, EN60950-1								
OTHERS	CASE SIZE/WEIGHT	61 × 12.7 × 116.8mm [2.4 × 0.5 × 4.6 inches] (W × H × D) / 180g max								
	COOLING METHOD	Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)								

*1 At rated input(DC48V) and rated load.
 *2 Ripple and ripple noise is measured by using measuring board with recommended capacitor Co & the film capacitor 0.1 μF.
 Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN:RM101).
 *3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

*4 When using with in the range of 1-1.2V, please consult with us.
 *5 CDS4004828 : Output voltage adjustment range is 60 - 114.3%.
 *6 Please consult us in regard to use from -40°C.

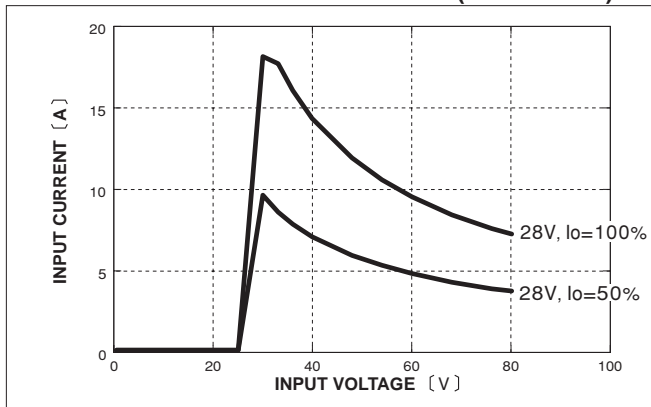
External view



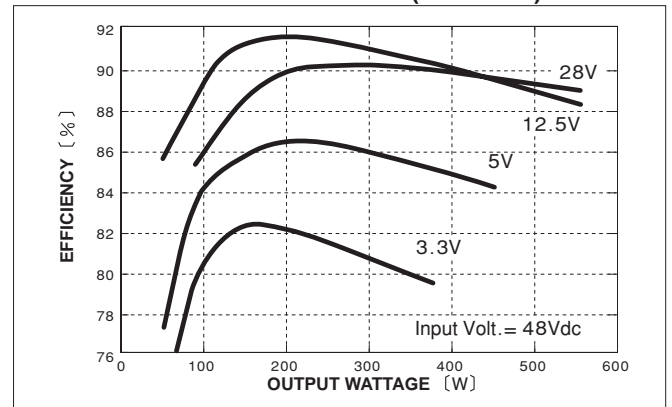
CDS

Performance data

INPUT CURRENT CHARACTERISTICS (CDS4004828)

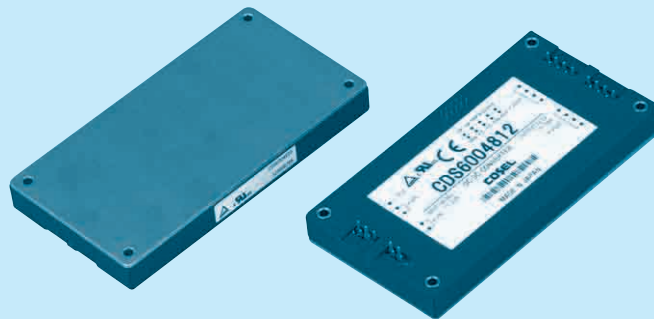


EFFICIENCY CHARACTERISTICS (CDS40048)



CDS500/600

CD
S
600
48
12
□
-□



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Input voltage
24:DC18 - 36V
48:DC36 - 76V
- ⑤ Output voltage
- ⑥ H: High Efficiency
(24VIN Model only)
- ⑦ Optional
M: with Mounting hole
M3 tapped

MODEL	CDS5002428H	CDS6002412	CDS6002412H	CDS6002428	CDS6002428H	CDS6004812	CDS6004828
MAX OUTPUT WATTAGE[W]	504	600	600	616	616	700	700
DC OUTPUT	28V 18A	12.5V 48A	12.5V 48A	28V 22A	28V 22A	12.5V 56A	28V 25A

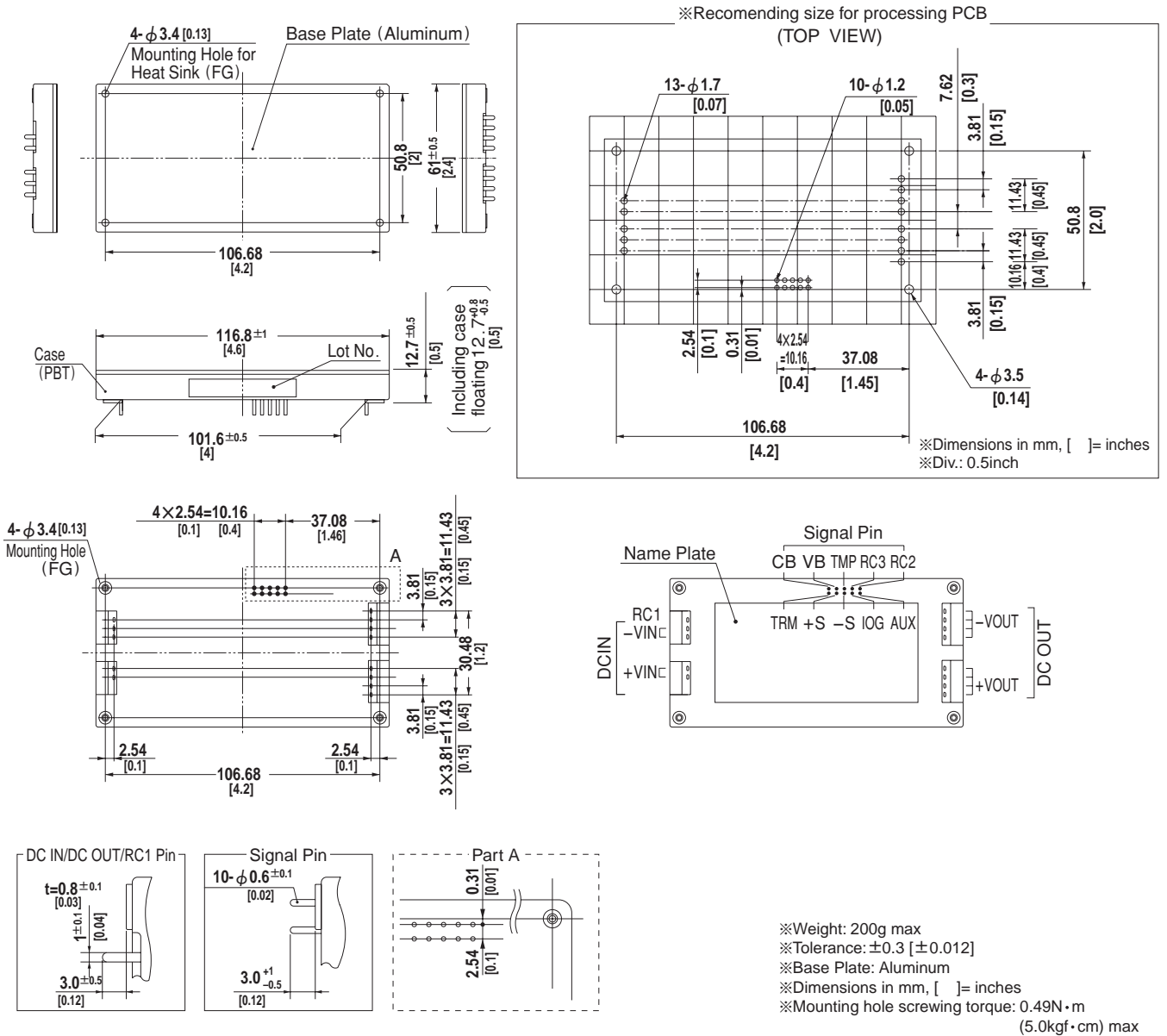
SPECIFICATIONS

	MODEL	CDS5002428H	CDS6002412	CDS6002412H	CDS6002428	CDS6002428H	CDS6004812	CDS6004828
INPUT	VOLTAGE[V]	DC18 - 36		DC20.5 - 36	DC18 - 36		DC19 - 36	DC36 - 76
	CURRENT[A]	24typ		30typ	29typ		30typ	17typ
	EFFICIENCY[%]	89typ(DCIN 24V)		83typ(DCIN 24V)	87typ(DCIN 24V)		86typ(DCIN 24V)	89typ(DCIN 24V)
OUTPUT		90typ(DCIN 24V)		87typ(DCIN 24V)	90typ(DCIN 24V)		87typ(DCIN 24V)	90typ(DCIN 24V)
		89typ(DCIN 48V)		83typ(DCIN 48V)	87typ(DCIN 48V)		86typ(DCIN 48V)	89typ(DCIN 48V)
		90typ(DCIN 48V)		87typ(DCIN 48V)	90typ(DCIN 48V)		87typ(DCIN 48V)	90typ(DCIN 48V)
	VOLTAGE[V]	28		12.5	28		28	12.5
	CURRENT[A]	18		48	48		22	25
	LINE REGULATION[mV]	95max		40max	40max		95max	95max
	LOAD REGULATION[mV]	190max		100max	100max		190max	190max
	RIPPLE[mVp-p]	120max		120max	120max		120max	120max
		160max		160max	160max		160max	160max
		150max		150max	150max		150max	150max
	180max		180max	180max		180max	180max	
	280max		120max	120max		280max	280max	
	480max		200max	200max		480max	480max	
DRIFT[mV]	90max		40max	40max		90max	90max	
START-UP TIME[ms]	200max (DCIN 24V, Io=100%)						200max (DCIN 48V, Io=100%)	
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed (TRM pin open), 80 - 110% adjustable by external VR or external voltage							
OUTPUT VOLTAGE SETTING[V]	22.40 - 32.00 *4 *5		10.00 - 13.75		10.00 - 13.75 *5		22.40 - 30.80	
	27.72 - 28.28 *6		12.00 - 13.00		12.00 - 13.00		26.88 - 29.12	
			26.88 - 29.12		26.88 - 29.12		12.00 - 13.00	
			26.88 - 29.12		26.88 - 29.12		26.88 - 29.12	
OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically							
OVERVOLTAGE PROTECTION[V]	33.00 - 39.20		14.35 - 17.50			33.00 - 39.20		14.35 - 17.50
REMOTE SENSING	Provided							
REMOTE ON/OFF	Provided (On both side of input and output)							
ISOLATION	INPUT-OUTPUT	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)						
	INPUT-FG	AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)						
	OUTPUT-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C)						
	OUTPUT-RC2,RC3	AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (20±15°C)						
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE *7	-20 to +85°C (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max						
	STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +85°C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max						
	VIBRATION	10 - 55Hz, 49.0m/s ² (5G) 3minutes period, 60minutes each along X, Y and Z axis						
	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis						
SAFETY	AGENCY APPROVALS	UL60950-1, C-UL, EN60950-1						
OTHERS	CASE SIZE/WEIGHT	61 × 12.7 × 116.8mm [2.4 × 0.5 × 4.6 inches] (W × H × D) / 200g max						
	COOLING METHOD	Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)						

*1 At rated input(DC24,DC48V) and rated load.
 *2 Ripple and ripple noise is measured by using measuring board with recommended capacitor Co & the film capacitor 0.1 μF.
 Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN:RM101).
 *3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

*4 CDS5002428H,CDS6002428H,CDS6004828H:Output voltage adjustment range is 80 - 114.3%.
 *5 CDS5002428H,CDS6002412H,CDS6002428H:When the output voltage adjustment range is 101% or more,the input voltage range is limited(Refer to Instruction Manual).
 *6 Aluminum baseplate temperature Tc=25°C
 *7 Please consult us in regard to use from -40°C.

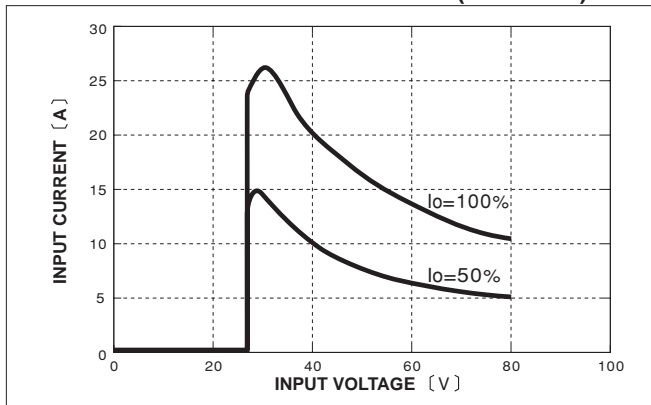
External view



CDS

Performance data

INPUT CURRENT CHARACTERISTICS (CDS60048)



EFFICIENCY CHARACTERISTICS (CDS60048)

