

#### FEATURES Single Output



- High Efficiency
- Small, Compact Size
- Universal Input
- Surface Mounting Technology
- Built-in EMI Filter
- Inrush Current Limit
- Adjustable Output Voltage
- Output Over Current Protection
- Output Over Voltage Protection
- Over Temperature Protection
- Low Output Ripple / Noise
- Isolated Output
- 2 Years Warranty

#### ELECTRICAL SPECIFICATIONS

##### Input

• Voltage	CS200L : AC 90V - 132V (NOTE1) CS200 : AC 170V - 264V (or DC 240 - 340V) (NOTE2)
• Current	4.4A Max. (CS200L) / 2.3A Max. (CS200)
• Frequency	47 - 440Hz Max. (50 - 60Hz typ.)
• Efficiency	80 - 89% Typ.
• Inrush Current (at Cold Start)	20A Max. @110Vac (CS200L) / 40A Max. @220Vac (CS200)
• Leakage Current	0.5mA Max. @110Vac (CS200L) / 0.75mA Max. @220Vac (CS200)

##### Output

• Output Voltage Tolerance	±10% Typ.
• Ripple and Noise	±1.0% Max.
• Line Regulation	±1.0% Max.
• Load Regulation	±1.0% Max.
• Dynamic Load Regulation	±3.0% Max.
• Temperature Drift	±1.0% Typ.
• Rising Time	100ms Max.
• Holding Time	17ms Min.

##### Protection Circuit

• Over Current Protection	Work Over 105% of Rating (Auto-Restart)
• Over Voltage Protection	Work at 115~140% of Rating (Latch-Up Mode)
• Over Temperature Protection	80°C Min.

##### Electrically Isolated

• Input - Output	AC 3KV, 1min. 10mA / DC 500V, 100M Min.
• Input - FG	AC 2KV, 1min. 10mA / DC 500V, 100M Min.
• Output - FG	AC 0.5KV, 1min. 10mA / DC 500V, 70M Min.

NOTE 1. For cases where conformance to various safety specs (CE) are required, input voltage and frequency range will be 100-120VAC, 50/60Hz.  
2. For cases where conformance to various safety specs (CE) are required, input voltage and frequency range will be 200-240VAC, 50/60Hz.

ENVIRONMENTAL

- Operating Temperature Range ..... -10°C ~ 60°C
- Operating Humidity (Non-Condensing) ..... 20% ~ 90%RH
- Storage Temperature Range ..... -20°C ~ 70°C
- Storage Humidity (Non-Condensing) ..... 20% ~ 90%RH
- Vibration ..... 10 ~ 55Hz at 2G 3Minutes Period
- Impact ..... 20G for 11ms, once on each X, Y and Z-axis
- Cooling Method ..... Convection
- MTBF (MIL-HDBK-217F) ..... 1.3 X 10<sup>5</sup> hrs
- Safety (Single Output) ..... CE\_LVD (EN 60950-1) through TÜV
- Noise ..... Meets CISPR22-B / FCC class B

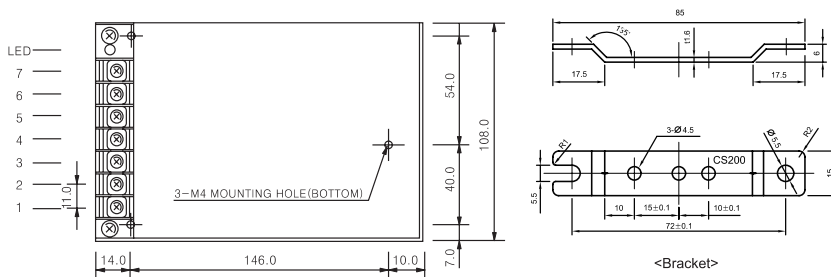
ORDERING INFORMATION

Input	Output	Maximum Power	Ripple&Noise Max.	Efficiency Typ.	Model Number
AC 90 ~ 132V or AC 170 ~ 264V (DC 240~340V)	+3.3V@40.00A	132.00W	80mVp-p	80%	<b>CS200L-3R3</b>
	+5.0V@40.00A	200.00W	100mVp-p	83%	<b>CS200L-5</b>
	+12.0V@16.80A	201.60W	120mVp-p	86%	<b>CS200L-12</b>
	+15.0V@13.50A	202.50W	150mVp-p	86%	<b>CS200L-15</b>
	+24.0V@8.40A	201.60W	200mVp-p	87%	<b>CS200L-24</b>
	+48.0V@4.20A	201.60W	300mVp-p	88%	<b>CS200L-48</b>
	+3.3V@40.00A	132.00W	80mVp-p	81%	<b>CS200-3R3</b>
	+5.0V@40.00A	200.00W	100mVp-p	84%	<b>CS200-5</b>
	+12.0V@16.80A	201.60W	120mVp-p	87%	<b>CS200-12</b>
	+15.0V@13.50A	202.50W	150mVp-p	87%	<b>CS200-15</b>
	+24.0V@8.40A	201.60W	200mVp-p	88%	<b>CS200-24</b>
	+48.0V@4.20A	201.60W	300mVp-p	89%	<b>CS200-48</b>

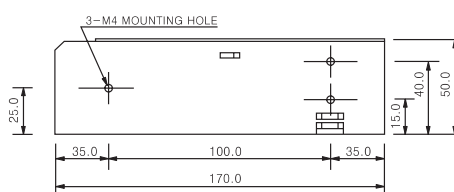
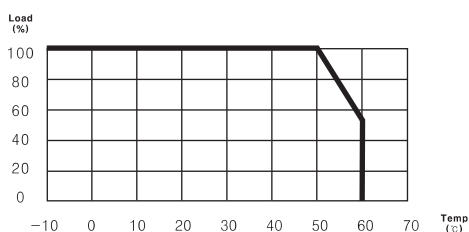
PIN ASSIGNMENTS

Connector	Single
CN 1	1. AC(N)
	2. AC(L)
	3. FG
	4. - V
	5. - V
	6. +V
	7. +V

DIMENSION



DERATING CURVE



NOTE

- 1 All dimensions are in mm
- 2 Weight : 1,000g or less (single)  
Mounting holes(5) for M3 screw, which should not enter the supply surface by more than 3.5mm.