



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

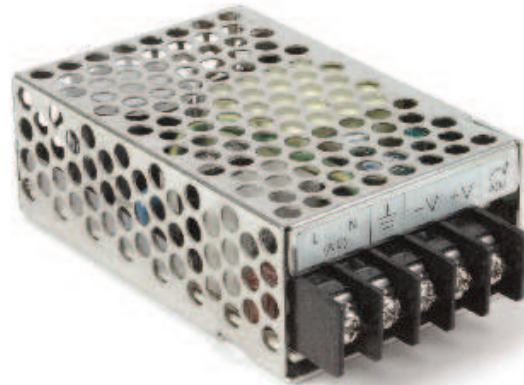
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



SERIES: VGS-25 | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

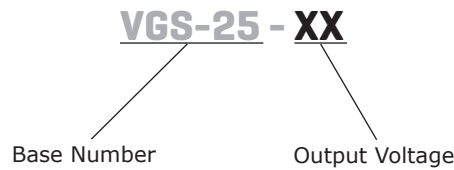
- up to 27 W continuous power
- compact footprint
- universal input (88~264 Vac / 125~373 Vdc)
- single output from 3.3~48 V
- over voltage, over load, and short circuit protections
- UL/cUL and TUV safety approvals
- long life electrolytic capacitors
- no load power consumption < 0.5 W
- efficiency 88%



| MODEL | output voltage | output current | output power | ripple and noise | efficiency |
|------------|----------------|----------------|--------------|------------------|------------|
| | (Vdc) | max (A) | max (W) | max (mVp-p) | (%) |
| VGS-25-3.3 | 3.3 | 6 | 19.8 | 100 | 74 |
| VGS-25-5* | 5 | 5 | 25 | 100 | 83 |
| VGS-25-12 | 12 | 2.1 | 25.2 | 120 | 85 |
| VGS-25-15 | 15 | 1.7 | 25.5 | 120 | 86 |
| VGS-25-24 | 24 | 1.1 | 26.4 | 120 | 87 |
| VGS-25-48 | 48 | 0.57 | 27.36 | 120 | 88 |

Notes: * Discontinued model.

PART NUMBER KEY



INPUT

| parameter | conditions/description | min | nom | max | units |
|-----------------|--|-----------|-----|-------------|------------|
| voltage range | | 88 125 | | 264 373 | Vac Vdc |
| frequency range | | 50 | | 60 | Hz |
| current | at 115 Vac, cold start at 230 Vac, cold start | | | 0.7 0.35 | A A |
| inrush current | at 230 Vac, full load, cold start | | | 30 | A |

OUTPUT

| parameter | conditions/description | min | nom | max | units |
|-------------------|--|----------|----------------------|-----|-------------|
| voltage adjust | | | ±10 | | |
| voltage tolerance | 3.3 V models 5 V models all other models | | ±3 ±2 ±1 | | % % % |
| line regulation | low line to high line | | ±0.5 | | % |
| load regulation | 3.3 V models 5 V models all other models | | ±2.0 ±1.0 ±0.5 | | % % % |
| start-up time | at 115 Vac, cold start at 230 Vac, cold start | | 1.0 0.8 | | s s |
| rise time | at 115 Vac, cold start at 230 Vac, cold start | | 65 50 | | ms ms |
| hold-up time | at 115 Vac, cold start at 230 Vac, cold start | 10 32 | | | ms ms |

PROTECTIONS

| parameter | conditions/description | min | nom | max | units |
|------------------|----------------------------|-----|-----|-----|-------|
| over load | Hiccup mode, auto recovery | | | 110 | % |
| over voltage | latch off mode | 115 | | 150 | % |
| over-temperature | | 52 | | | °C |
| short circuit | continuous | | | | |

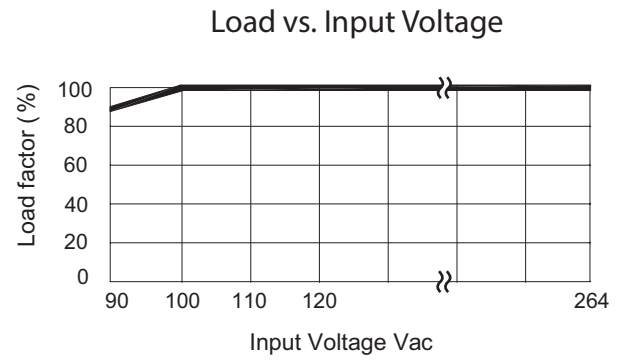
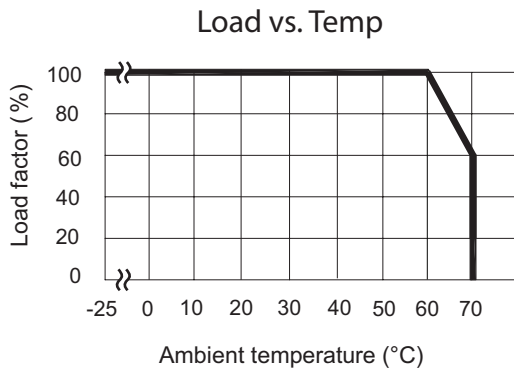
SAFETY & COMPLIANCE

| parameter | conditions/description | min | nom | max | units |
|----------------------|---|-----------------------|-----|-----|-------------------|
| isolation voltage | input to output: input to case: output to case: | 4,242 2,121 707 | | | Vdc Vdc Vdc |
| isolation resistance | input to output at 500 V dc | 100 | | | MΩ |
| safety approvals | UL 60950-1 / TUV EN 60950-1 | | | | |
| EMI/EMC | EN 55022 : 1998+A1 : 2000+A2 : 2003 Class B, EN 61000-3-2 : 2000+A2 : 2005 Class A, EN 61000-3-3 : 1995+A1 : 2001, EN 61204-3 : 2000 EN 50204 1998+A1 : 2001+A2 : 2003 light industry level, criteria A | | | | |
| leakage current | measured per IEC 60950-1, paragraph 5.1, test voltage of 240 Vac/60 Hz | | | 2 | mA |
| RoHS compliant | yes | | | | |
| MTBF | at 230 Vac, MIL-HDBK-217F 25 °C ambient | 620,300 | | | hrs |

ENVIRONMENTAL

| parameter | conditions/description | min | nom | max | units |
|-------------------------|---|-----|-----|-----|-------|
| operating temperature | see derating curve | -20 | | 70 | °C |
| storage temperature | see derating curve | -40 | | 85 | °C |
| temperature derating | linearly from 100% load at 50°C to 50% load at 70°C | | | | |
| relative humidity | non-condensing operating | 20 | | 90 | % |
| temperature coefficient | (0 ~ 50°C) | | 0.3 | | %/°C |
| vibration | (10 ~ 500 Hz, 1 hour per axis, 3 hours total) | | 5 | | Grms |

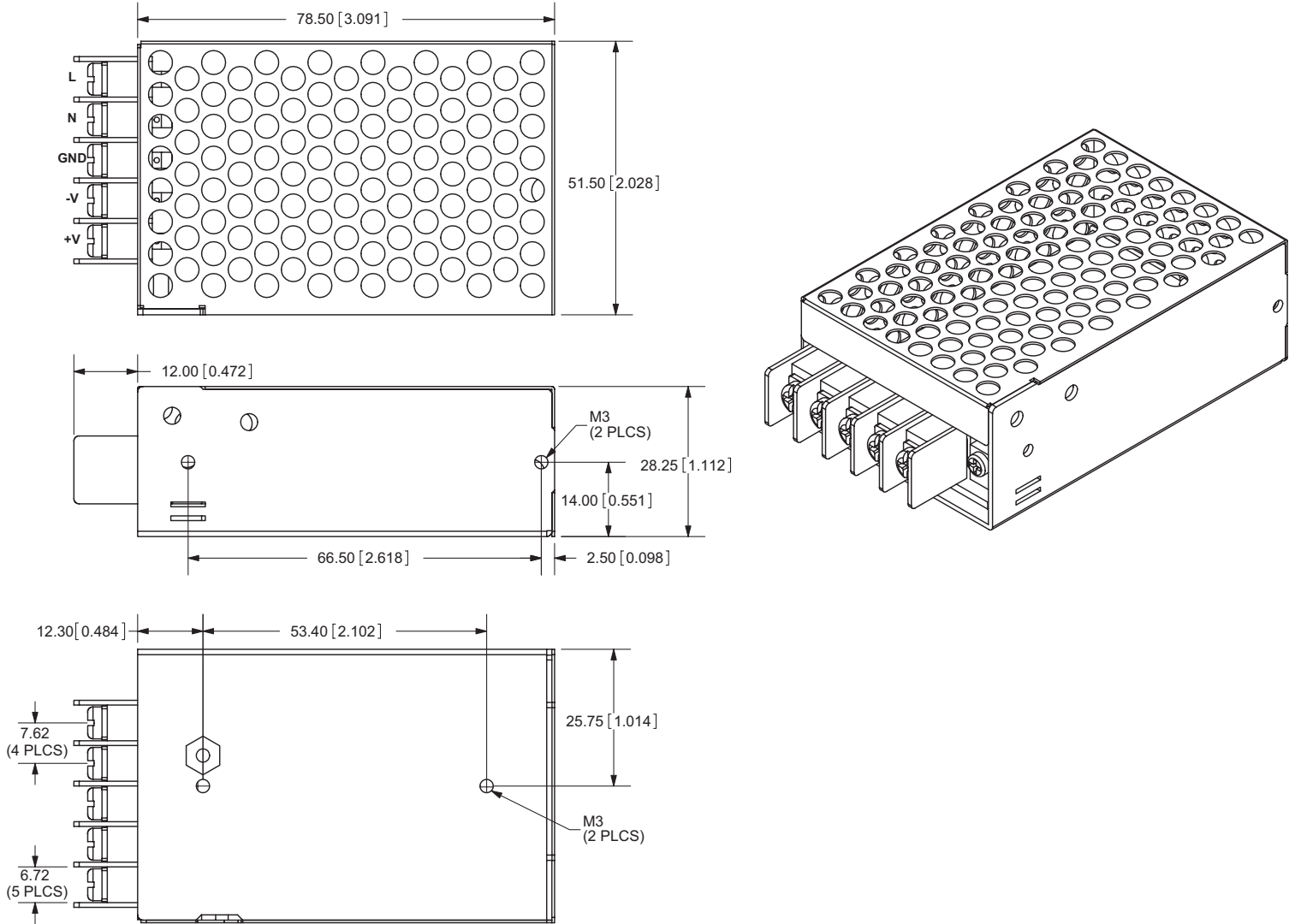
DERATING CURVES



MECHANICAL DRAWING

Note:
tolerance: $\pm 0.3\text{mm}$ unless otherwise specified

terminal block screws #6-32 (5 PLCS)



REVISION HISTORY

| rev. | description | date |
|------|---------------------------------|------------|
| 1.0 | initial release | 07/21/2008 |
| 1.01 | V-Infinity branding removed | 08/21/2012 |
| 1.02 | corrected output current values | 02/14/2013 |
| 1.03 | discontinued VGS-25-5 model | 04/11/2017 |

The revision history provided is for informational purposes only and is believed to be accurate.



CUI INC[®]

Headquarters
20050 SW 112th Ave.
Tualatin, OR 97062
800.275.4899

Fax 503.612.2383
cui.com
techsupport@cui.com

CUI offers a two (2) year limited warranty. Complete warranty information is listed on our website.

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.