

PRODUCT SPECIFICATION

DATE: 05/27/11'

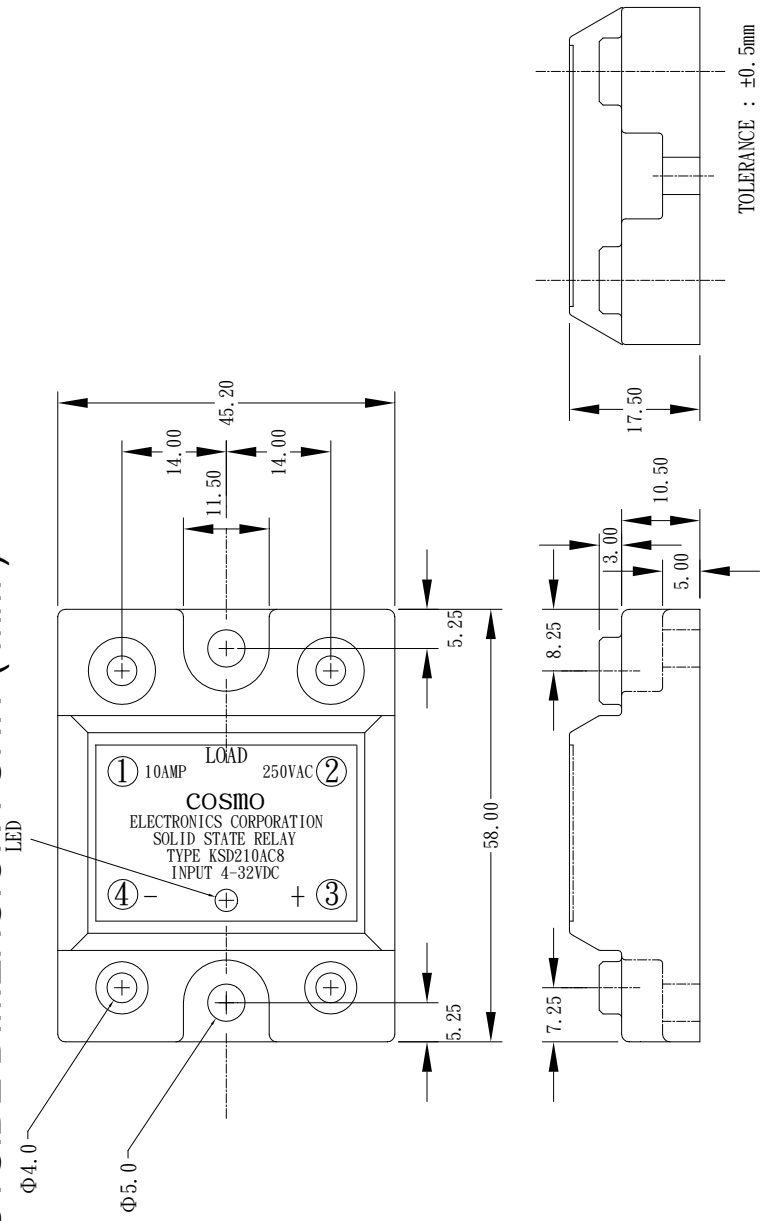
cosmo
ELECTRONICS CORPORATION

SOLID STATE RELAY :
KSD210AC8

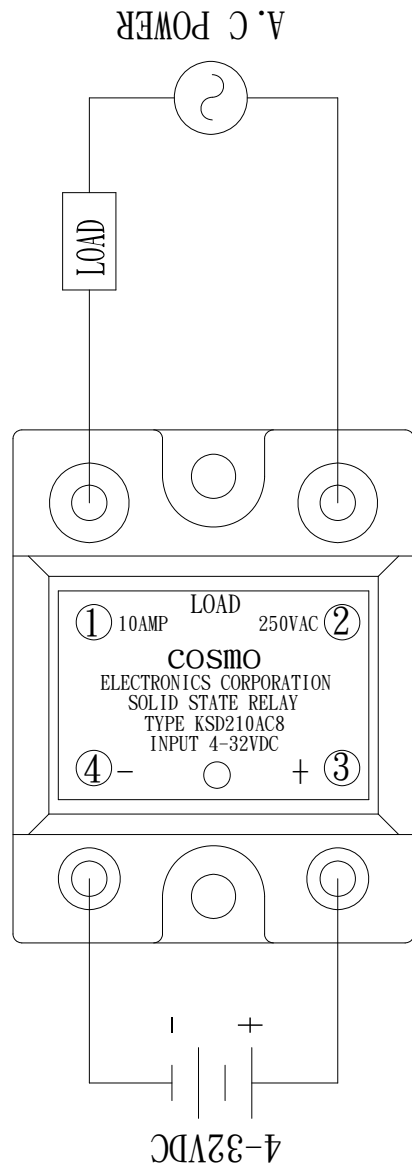
NO. 58082210
SHEET 1 OF 2

REV.
6

1. OUTSIDE DIMENSION : UNIT (mm)



2. SCHEMATIC : TOP VIEW



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|---|---------------------|--------------|------|
| cosmo ELECTRONICS CORPORATION | SOLID STATE RELAY : | NO. 58082210 | REV. |
| | KSD210AC8 | SHEET 2 OF 2 | 6 |

3. Absolute Maximum Ratings

(Ta=25°C)

| Parameter | | Symbol | Rating | Unit |
|-----------------------------------|---|-------------|---------|---------|
| Input | Input signal voltage | V_{IN} | 4~32 | VDC |
| | Drop-out voltage | V_{do} | 1 | VDC |
| Output | RMS on-state current | I_T | 10 | Arms |
| | Peak one cycle surge current (8.3ms) | I_{surge} | 100 | A |
| | Repetitive peak-off state voltage | V_{DRM} | 600 | V |
| | Operating frequency | f | 47~70 | Hz |
| | Critical rate of rise of on-state current | di/dt | 50 | A/us |
| | Load supply voltage | V_{out} | 250 | Vrms AC |
| Isolation voltage input to output | | V_{iso} | 4000 | Vrms |
| Operating temperature | | T_{opr} | -30~100 | °C |
| Storage temperature | | T_{stg} | -30~125 | °C |
| Soldering temperature 10 sec | | T_{sol} | 300 | °C |

4. Electrical Characteristics

(Ta=25°C)

| Parameter | | Symbol | Conditions | MIN | TYP | MAX | Unit |
|---|--|-------------------|-------------------|-----|-----|-----|-------|
| Input | Pick-up voltage | V_{pu} | $I_T=1Arms$ | | | 4 | VDC |
| | Input current | I_{in} | $V_{in}=4\sim32V$ | 5 | | 12 | mA |
| Output | On-state voltage | V_T | $I_T=1Arms$ | | | 1.5 | Vrms |
| | Operating current | I_{op} | $V_{out}=240vrms$ | 50 | | | mArms |
| | Leakage current | I_{leak} | $V_{out}=240vrms$ | | 3.5 | 7 | mArms |
| | Critical rate of rise of off-state voltage | dv/dt | | 50 | 200 | | V/us |
| | Zero-cross voltage | V_{ox} | | | | YES | |
| | Load Voltage Rating | V_{out} | $I_T=50mArms$ MIN | 50 | | 280 | VAC |
| Minimum trigger current | | I_{FT} | $V_{DRM}=600V$ | | | 10 | mA |
| Isolation resistance input to output | | R_{ISO} | DC500V | 10 | | | GΩ |
| Turn-on time | | T_{on} | 60Hz AC | | | 8.3 | mS |
| Turn-off time | | T_{off} | 60Hz AC | | | 8.3 | mS |
| Thermal resistance (between junction and case) | | R_{th} (j-c) | | | 1.3 | | °C/W |