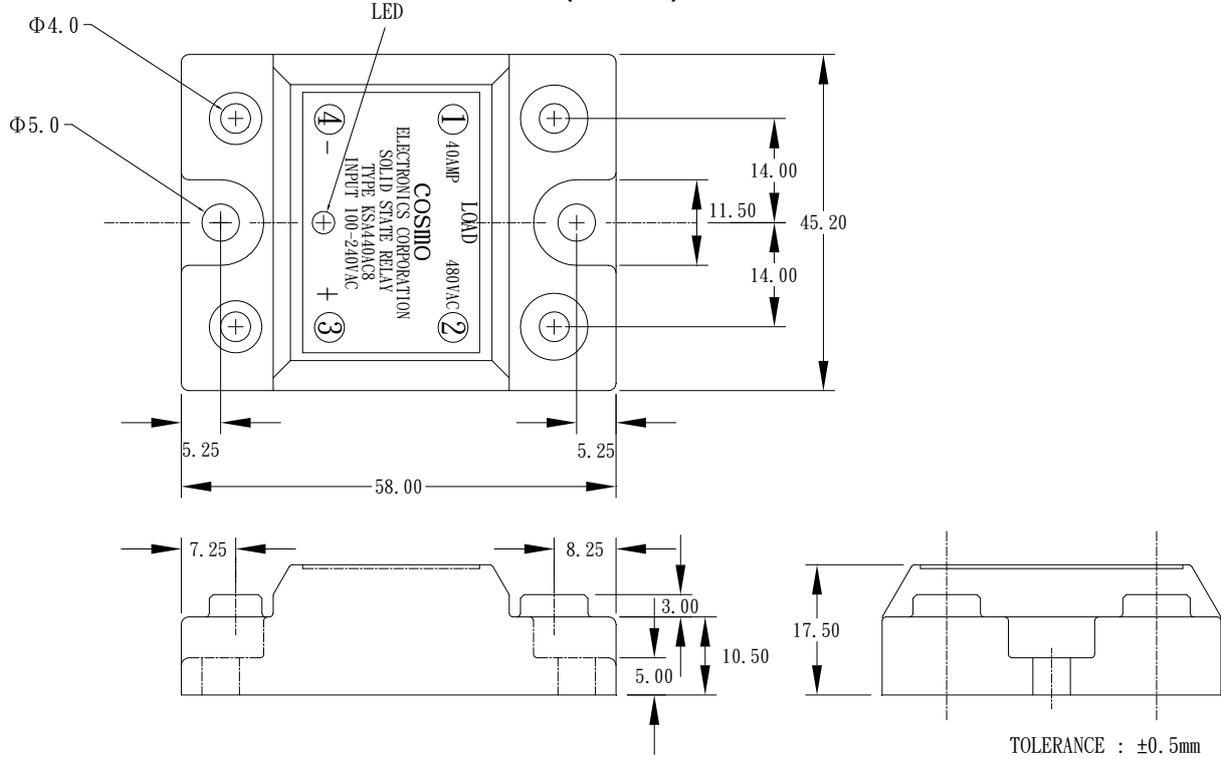


PRODUCT SPECIFICATION

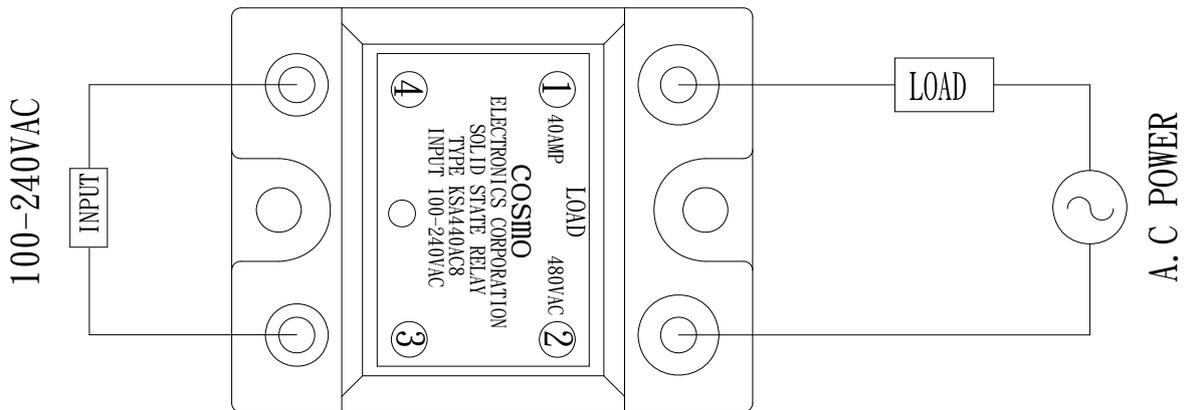
DATE: 05/27/11'

| | | | |
|---|---------------------|--------------|------|
| cosmo ELECTRONICS CORPORATION | SOLID STATE RELAY : | NO. 58083440 | REV. |
| | KSA440AC8 | SHEET 1 OF 2 | 6 |

1. OUTSIDE DIMENSION : UNIT (mm)



2. SCHEMATIC : TOP VIEW



PRODUCT SPECIFICATION

DATE: 05/27/11'

| | | | |
|---|---------------------|--------------|------|
| cosmo ELECTRONICS CORPORATION | SOLID STATE RELAY : | NO. 58083440 | REV. |
| | KSA440AC8 | SHEET 2 OF 2 | 6 |

3. Absolute Maximum Ratings

(Ta=25°C)

| Parameter | | Symbol | Rating | Unit |
|-----------------------------------|---|-------------|---------|---------|
| Input | Input signal voltage | V_{IN} | 100~240 | VAC |
| | Drop-out voltage | V_{do} | 10 | VAC |
| Output | RMS on-state current | I_T | 40 | Arms |
| | Peak one cycle surge current (8.3ms) | I_{surge} | 400 | A |
| | Repetitive peak-off state voltage | V_{DRM} | 800 | 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} | 480 | 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} | $R_{in}=11K\Omega$ | | | 100 | VAC |
| | Input current | R_{in} | | | 11 | | K Ω |
| Output | On-state voltage | V_T | $I_T=1Arms$ | | | 1.5 | Vrms |
| | Operating current | I_{op} | $V_{out}=480Vrms$ | 50 | | | mArms |
| | Leakage current | I_{leak} | $V_{out}=480Vrms$ | | | 12 | mArms |
| | Critical rate of rise of off-state voltage | dv/dt | | 50 | 150 | | V/us |
| | Zero-cross voltage | V_{ox} | | | YES | | |
| Load Voltage Rating | | V_{out} | $I_T=50mArms$ MIN | 75 | | 480 | VAC |
| Minimum trigger current | | I_{FT} | $V_{DRM}=800V$ | | | 25 | mA |
| Isolation resistance input to output | | R_{ISO} | DC500V | 10 | | | G Ω |
| 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) | | | 2.5 | | °C/W |