

# APPROVAL SHEET

|                     |                                      |
|---------------------|--------------------------------------|
| PART NAME           | TRANS-L.V                            |
| CODE NO             |                                      |
| SPEC                | DMR-631FS                            |
| MANUFACTURE<br>SPEC | 230V/50HZ<br>(35X14) S1:DC12.0V/0.2A |
| MODEL               |                                      |

2000

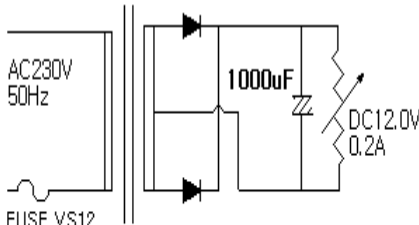


PURETEC.CO.,LTD

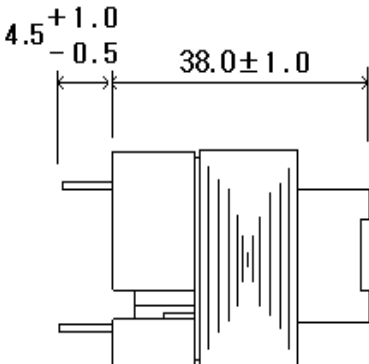
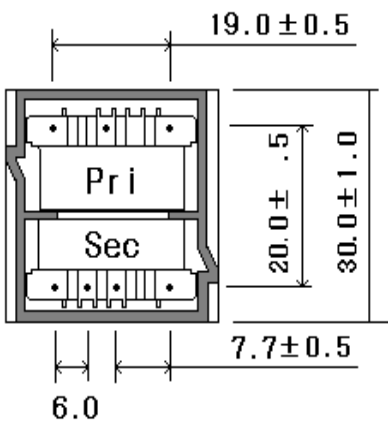
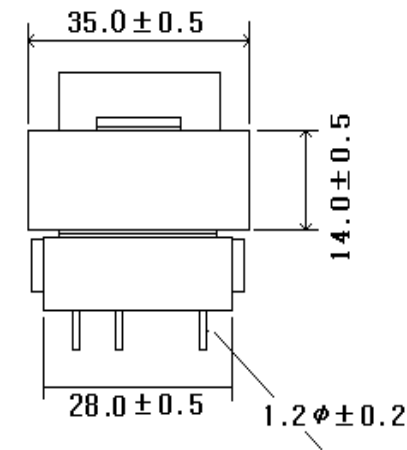


669 Haksan-ry Gasan-mun Chilgok-gun Kyungbuk Korea  
TEL, /FAX. 054-979-8000 / 054-979-8009

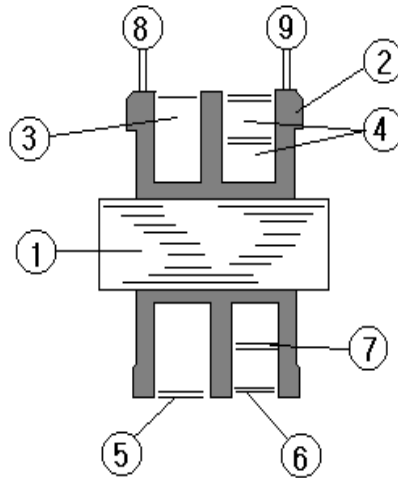
# TRANSFORMER SPECIFICATION

|                                                                                   |                                                                                                                                                |                      |              |                                                                       |                    |        |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------|-----------------------------------------------------------------------|--------------------|--------|
| PART NO                                                                           | DMR-631FS<br>(230V 50Hz)                                                                                                                       | SAFETY               | UL           | CORE SIZE                                                             | 35X14              |        |
| TEST CIRCUIT DIAGRAM                                                              |                                                                                                                                                |                      | Unit : mm    |                                                                       |                    |        |
|  |                                                                                                                                                |                      | NO           | PRIMARY                                                               | SECONDARY          | REMARK |
|                                                                                   |                                                                                                                                                |                      | 1            | PIN                                                                   |                    |        |
|                                                                                   |                                                                                                                                                |                      | 2            |                                                                       |                    |        |
|                                                                                   |                                                                                                                                                |                      | 3            | PIN                                                                   |                    |        |
|                                                                                   |                                                                                                                                                |                      | 4            | PIN                                                                   |                    |        |
|                                                                                   |                                                                                                                                                |                      | 5            |                                                                       | PIN                |        |
|                                                                                   |                                                                                                                                                |                      | 6            |                                                                       | PIN                |        |
|                                                                                   |                                                                                                                                                |                      | 7            |                                                                       | PIN                |        |
|                                                                                   |                                                                                                                                                |                      | 8            |                                                                       | PIN                |        |
|                                                                                   |                                                                                                                                                |                      | 9            |                                                                       |                    |        |
|                                                                                   |                                                                                                                                                |                      | 10           |                                                                       |                    |        |
|                                                                                   |                                                                                                                                                |                      | 11           |                                                                       |                    |        |
| TEST CONDITION                                                                    | TERMINAL NO                                                                                                                                    | RATED CONDITION (AC) |              |                                                                       |                    |        |
|                                                                                   |                                                                                                                                                | CURRENT              | VL           | VO                                                                    | Voltage Regulation |        |
|                                                                                   | S1 (6-8)                                                                                                                                       | 200mA                | DC12.0V ± 5% | AC30.8V ± 5%                                                          | 23% MAX            |        |
|                                                                                   |                                                                                                                                                |                      |              |                                                                       |                    |        |
|                                                                                   |                                                                                                                                                |                      |              |                                                                       |                    |        |
|                                                                                   |                                                                                                                                                |                      |              |                                                                       |                    |        |
| ROOM TEMP. Ω<br>(20.9 )                                                           | Primary                                                                                                                                        | S1                   |              |                                                                       |                    |        |
|                                                                                   | 1109                                                                                                                                           | 25.2                 |              |                                                                       |                    |        |
| Pri. Unload Current                                                               | AC 230V                                                                                                                                        | 50HZ                 | 50mA (MAX)   |                                                                       |                    |        |
| Voltage Unbalance                                                                 | Less Than % at Secondary Unload                                                                                                                |                      |              |                                                                       |                    |        |
| Dielectric Strength<br>(Load Current 2mA)                                         | 1) Pri. coil to core & Pri. coil to secondary coil : 4.0 KV / 1Minute<br>2) Sec. coil to core & Sec. coil to secondary coil : 1.0 KV / 1Minute |                      |              |                                                                       |                    |        |
|                                                                                   | * An alternative potentials 20% higher may be applied for 1 second.                                                                            |                      |              |                                                                       |                    |        |
| Temperature Rise                                                                  | ① At rated current loaded<br>② At 10% rise up of input after rated current load                                                                |                      |              | COIL(Resistance Method) : 60 deg<br>CORE(Thermocouple Method): 60 deg |                    |        |
| Insulation Resistance                                                             | Larger Than 100MΩ for DC500V,between winding to winding & core.                                                                                |                      |              |                                                                       |                    |        |
| Heat Test                                                                         | 6 hour in 100±3 ambient temperature,<br>after shall withstand item high pot test and larger than 10MΩ.                                         |                      |              |                                                                       |                    |        |
| Humidity Test                                                                     | 48 hour in 40±2 ambient temperature, at 90~95% RH.<br>after shall withstand item high pot test and larger than 5MΩ.                            |                      |              |                                                                       |                    |        |
| Induced Voltage Test                                                              | Shall withstand Without breakdown for 15 sec. 480HZ 460V<br>All secondary winding shall be unload. ( Input Voltage : 230V )                    |                      |              |                                                                       |                    |        |
| Strain Relief                                                                     | Shall withstand a force of 6.0 Kg for 15 seconds.                                                                                              |                      |              |                                                                       |                    |        |
| Watt Loss                                                                         | Less than 3.0W Input:230V ( Unload )                                                                                                           |                      |              |                                                                       |                    |        |

# DIMENSION



|           |           |      |           |  |
|-----------|-----------|------|-----------|--|
|           |           |      |           |  |
|           |           |      |           |  |
|           |           |      |           |  |
|           |           |      |           |  |
| PART NAME | TRANS-L.V | SPEC | DMR-631FS |  |



## MATERIAL LIST

| NO | PART NAME                 | SPEC                                     |                                | MAKER                                                            | REMARK                |
|----|---------------------------|------------------------------------------|--------------------------------|------------------------------------------------------------------|-----------------------|
| 1  | CORE                      | Dimension                                | 35mm(L) × 29.5mm(W) × 14mm(T)  | Po Hang Steel Inc., Ltd.                                         |                       |
|    |                           | Material                                 | 0.5t cold rolled silicon steel |                                                                  |                       |
| 2  | Bobbin                    | Polyethylene terephthalate (FR-530) 0.9t |                                | Du Pont De Nomours &Co.,Ltd.                                     | E69578 (UL94V-0)      |
| 3  | Copper Wire               | P1                                       | φ Turn                         | Young Hwa Sa Co., Ltd.<br>Dong Yang Electronics Ind,<br>Co.,Ltd. | E141925<br>E102761(N) |
| 4  |                           | S1                                       | φ Turn                         |                                                                  |                       |
|    |                           | S2                                       |                                |                                                                  |                       |
| 5  | Primary wrap insulation   | Pe film tape 0.025t x 2turn (DTS-204)    |                                | Duck Sung Tape Co., Ltd.                                         | E105147               |
| 6  | Secondary wrap insulation | Pe film tape 0.025t x 2turn (DTS-204)    |                                |                                                                  |                       |
| 7  | between S1~S2 Insulation  | Pe film tape 0.025t x 2turn (DTS-204)    |                                |                                                                  |                       |
| 8  | Primary PIN               | Copper Ally (Pin)                        |                                | Dae-A Lead Wire co.,Ltd                                          | EN29002               |
| 9  | Secondary PIN             |                                          |                                |                                                                  |                       |
|    | Coil impregnate           | UNVARNISHED                              |                                |                                                                  |                       |
|    | Class of Insulation       | E                                        |                                |                                                                  |                       |