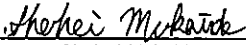


Approved : 
Takayuki FukudaPrepared : 
Shohei Mukaide

| No. | Test Item | Testing conditions | Conditions of acceptability | Number of samples | Number of failures |
|-----|---|--|---|-------------------|--------------------|
| 1 | Heat cycle test | (1) -40° C ~ 125° C 30minutes each (2) 800cycles | (1)No degradation of electric characteristics after test. (2)No crack at solder joint. | 5 | 0 |
| 2 | High temperature/ High humidity bias test | (1) Ta=85°C, RH=85% (2) Input Max.Voltege (3) Load 0% (4) 1000hours | (1)No degradation of electric characteristics after test. | 5 | 0 |
| 3 | Vibration test | (1) f=10~55Hz, 98.0m/s ² (10G) (2) 3minutes period (3) 60minutes each X, Y and Z axis | (1)No degradation of electric characteristics after test. (2)No crack at solder joint. (3)No mechanical damage of appearance. | 6 | 0 |
| 4 | Impact test | (1) 490.3m/s ² (50G), 11ms (2) Once each X, Y and Z axis | (1)No degradation of electric characteristics after test. (2)No crack at solder joint. (3)No thermal damage of appearance. | 3 | 0 |
| 5 | Soldering heat test | (1) Soldering iron 340~360°C, 7.5 seconds (2) Mounting board : t=1.6mm / FR4 | (1)No crack at solder joint. (2)No marked damage of appearance. | 1 | 0 |
| 6 | Pin solder ability test | (1) Pre-process Step1 Humidifying processing (100°C, 100%, 1H) Step2 Dip into flux (2) Dip soldering 230~240°C, 2sec | (1)Over 95% of dipped part is covered with solder. | 3 | 0 |
| 7 | Pin strength test | (1) Weight : 1kg (2) Bending angle : 90 deg., total 180 deg. (3) 1 cycle | (1)No crack at solder joint. (2)No mechanical damage of appearance. | 1 | 0 |
| 8 | Static electricity immunity test | (1) Applied voltage ±4kV (2) At rated input and load (3) Testing circuitry Fig.1 | (1)No protection circuit fail. (2)No output voltage drop due to control (3)No any other function fail. | 7 | 0 |

○Testing circuitry

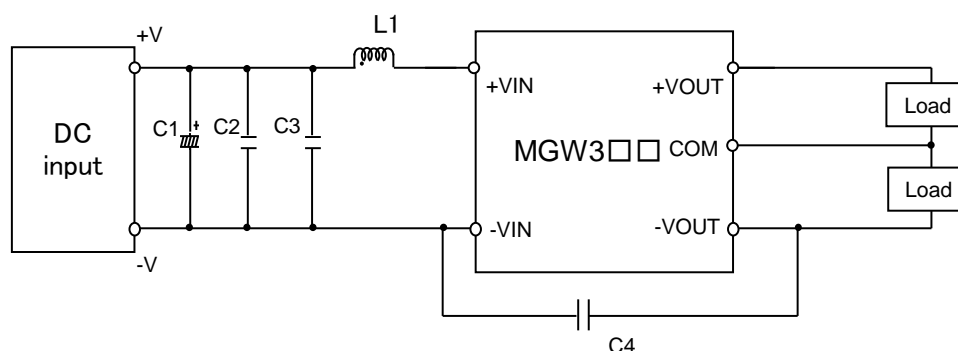


Fig.1 Testing circuitry

| | | |
|------|----------|--|
| C1 : | MGW305□□ | 25V 100 μ F Electric capacitor (LXZseries NIPPON CHEMI-CON) |
| | MGW312□□ | - |
| | MGW324□□ | - |
| | MGW348□□ | - |
| C2 : | MGW305□□ | 16V 22 μ F Ceramic capacitor (GRM31CC71C226K MURATA MANUFACTURING) |
| | MGW312□□ | 25V 10 μ F Ceramic capacitor (GRM31CR71E106K MURATA MANUFACTURING) |
| | MGW324□□ | 50V 4.7 μ F Ceramic capacitor (GRM31CR71H475K MURATA MANUFACTURING) |
| | MGW348□□ | 100V 2.2 μ F Ceramic capacitor (GRM31CC72A225K MURATA MANUFACTURING) |
| C3 : | MGW305□□ | 16V 22 μ F Ceramic capacitor (GRM31CC71C226K MURATA MANUFACTURING) |
| | MGW312□□ | 25V 10 μ F Ceramic capacitor (GRM31CR71E106K MURATA MANUFACTURING) |
| | MGW324□□ | 50V 4.7 μ F Ceramic capacitor (GRM31CR71H475K MURATA MANUFACTURING) |
| | MGW348□□ | 100V 2.2 μ F Ceramic capacitor (GRM31CC72A225K MURATA MANUFACTURING) |
| C4 : | MGW305□□ | 2kV 470pF Ceramic capacitor (GR442QR73D471K MURATA MANUFACTURING) |
| | MGW312□□ | 2kV 470pF Ceramic capacitor (GR442QR73D471K MURATA MANUFACTURING) |
| | MGW324□□ | 2kV 470pF Ceramic capacitor (GR442QR73D471K MURATA MANUFACTURING) |
| | MGW348□□ | 2kV 470pF Ceramic capacitor (GR442QR73D471K MURATA MANUFACTURING) |
| L1 : | MGW305□□ | 1550mA 3.3 μ H Inductor(LQH32PN3R3NNCL MURATA MANUFACTURING) |
| | MGW312□□ | 1200mA 4.7 μ H Inductor(LQH32PN4R7NNCL MURATA MANUFACTURING) |
| | MGW324□□ | 900mA 10 μ H Inductor(LQH32PN100MNCL MURATA MANUFACTURING) |
| | MGW348□□ | 550mA 22 μ H Inductor(LQH32PN220MNCL MURATA MANUFACTURING) |