



GENERAL INFORMATION

QUALITY CONTROL AND ASSURANCE

1. SAMPLING PLAN

U.S.Ministry of defense MIL-STD-105D level II (single sampling plans)

2. INSPECTION ITEMS AND CRITERIONS FOR JUDGEMENTS

Measuring Methods for light Emitting Diode (No.11830)and Light Emitting Diodes (No.11829)

Stipulated by ministry of economical affairs of R.O.C.and by reference to Q.C. Standards prevailing in prominent LED plants worldwide.

3. RELIABILITY TESTS

General Provisions for Environmental Tests of CNS-Categorized Electronic Parts,

3623-3634,5637,11233-11238,and U.S.Ministry of National Defense MIL-STD-750 Specifications.

Test Item	Test Conditions
Operation Life Test	LED connected to a source of power and charged with 20mA at room temperature (25°C) for 1000 hours.
Temperature Cycle Test	-35°C ~ +25°C CRH=80% ~ +85°C CRH=80% as 1 cycle (60minutes) (20minutes) (60minutes) The duration of the test shall be for 5 complete cycle.
Thermal Shock Test	LED placed in a chamber(-35°C)for 20 minutes, temperature increased instantaneously to +85°Cfor 20minutes. The duration of the test shall be for 10 complete cycles.(MIL-STD-202:107D)
High Temperature Storage Test	Ta=+85°C±5°C CRH=50% Test Time : 1000 hours.
Low Temperature Storage Test	Ta=-35°C±5°C Test Time : 1000 hours.
Humidity Storage Test	Ta=65°C±5°C CRH=90 ~ 95% Test Time : 1000 hours.
Solderability Test	Preheating : 140°C-160°C, within 2 minutes. Operation heating : 235°C(Max.), within 10 seconds.(Max.)

The measuring terms after test and failure criteria as follows :

Measuring Terms	Failure Criteria
Luminous Intensity(Iv)	Lower Standard Limit x0.5
Forward Voltage(Vf)	Lower Standard Limit x1.2
Reverse Current(Ir)	Lower Standard Limit x2.0