HIGH VOLTAGE LED LAMPS

Lead-Free Parts

LG2040/HV12-O-W54

DATA SHEET

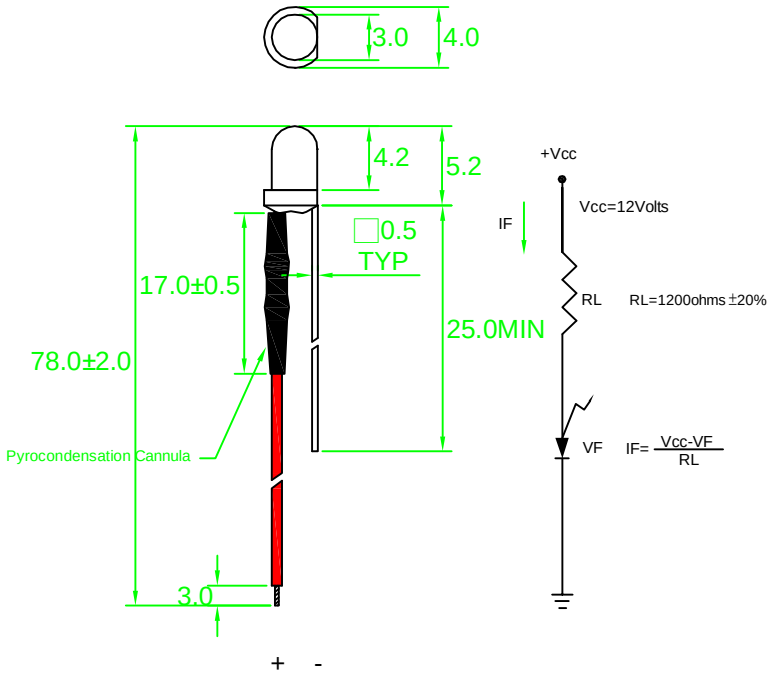
DOC. NO : QW0905-LG2040/HV12-O-W54

REV. : A

DATE : 26 - Dec. - 2006

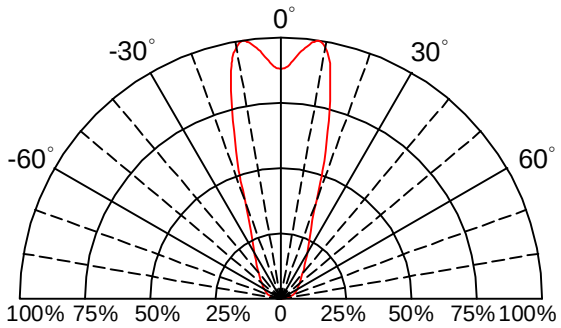
LG2040/HV12-O-W54

Package Dimension



Note:1.All dimension are in millimeter tolerance is ±0.25mm unless otherwise noted
2.Specifications are subject to change without notice

Directivity Radiation



• Part Selection And Application Information (Ratings At 25℃ Ambient)

PART NO	MATERIAL	COLOR		Peak wave length λ Pnm	Spectral halfwidth △λ nm	Forward current (mA) @12V		Luminous Intensity (mcd) @12V		Reverse current (μA) VR=15V	Viewing angle 2θ 1/2 (deg)
		Emitted	Lens			Min.	Max.	Min.	Typ.	Max.	
LG2040/HV12-O-W54	GaP	Green	Green Diffused	565	30	6.0	12	8.0	20	100	36

• Absolute Maximum Rating (Ta=25℃)

PARAMETER	GREEN	UNIT	REMARK
	G		
Forward voltage	12	V	
Reverse voltage	15	V	
Operating Temperature	-40℃ TO +85℃		
Storage Temperature	-40℃ TO +100℃		

Lead Soldering Temperature 260℃ For 5 Seconds(2.0mm From Body)

Reliability Test:

Test Item	Test Condition	Description	Reference Standard
Operating Life Test	1.Under Room Temperature 2.If=20mA 3.t=1000 hrs (-24hrs, +72hrs)	This test is conducted for the purpose of detemining the resistance of a part in electrical and themal stressed.	MIL-STD-750: 1026 MIL-STD-883: 1005 JIS C 7021: B-1
High Temperature Storage Test	1.Ta=105℃±5℃ 2.t=1000 hrs (-24hrs, +72hrs)	The purpose of this is the resistance of the device which is laid under condition of high temperature for hours.	MIL-STD-883:1008 JIS C 7021: B-10
Low Temperature Storage Test	1.Ta=-40℃±5℃ 2.t=1000 hrs (-24hrs, +72hrs)	The purpose of this is the resistance of the device which is laid under condition of low temperature for hours.	JIS C 7021: B-12
High Temperature High Humidity Test	1.Ta=65℃±5℃ 2.RH=90%~95% 3.t=240hrs±2hrs	The purpose of this test is the resistance of the device under tropical for hours.	MIL-STD-202:103B JIS C 7021: B-11
Thermal Shock Test	1.Ta=105℃±5℃&-40℃±5℃ (10min) (10min) 2.total 10 cycles	The purpose of this is the resistance of the device to sudden extreme changes in high and low temperature.	MIL-STD-202: 107D MIL-STD-750: 1051 MIL-STD-883: 1011
Solder Resistance Test	1.T.Sol=260℃±5℃ 2.Dwell time= 10±1sec.	This test intended to determine the thermal characteristic resistance of the device to sudden exposures at extreme changes in temperature when soldering the lead wire.	MIL-STD-202: 210A MIL-STD-750: 2031 JIS C 7021: A-1
Solderability Test	1.T.Sol=230℃±5℃ 2.Dwell time=5±1sec	This test intended to see soldering well performed or not.	MIL-STD-202: 208D MIL-STD-750: 2026 MIL-STD-883: 2003 JIS C 7021: A-2