

Mode Electronics Ltd.

Part No.

55-611-0

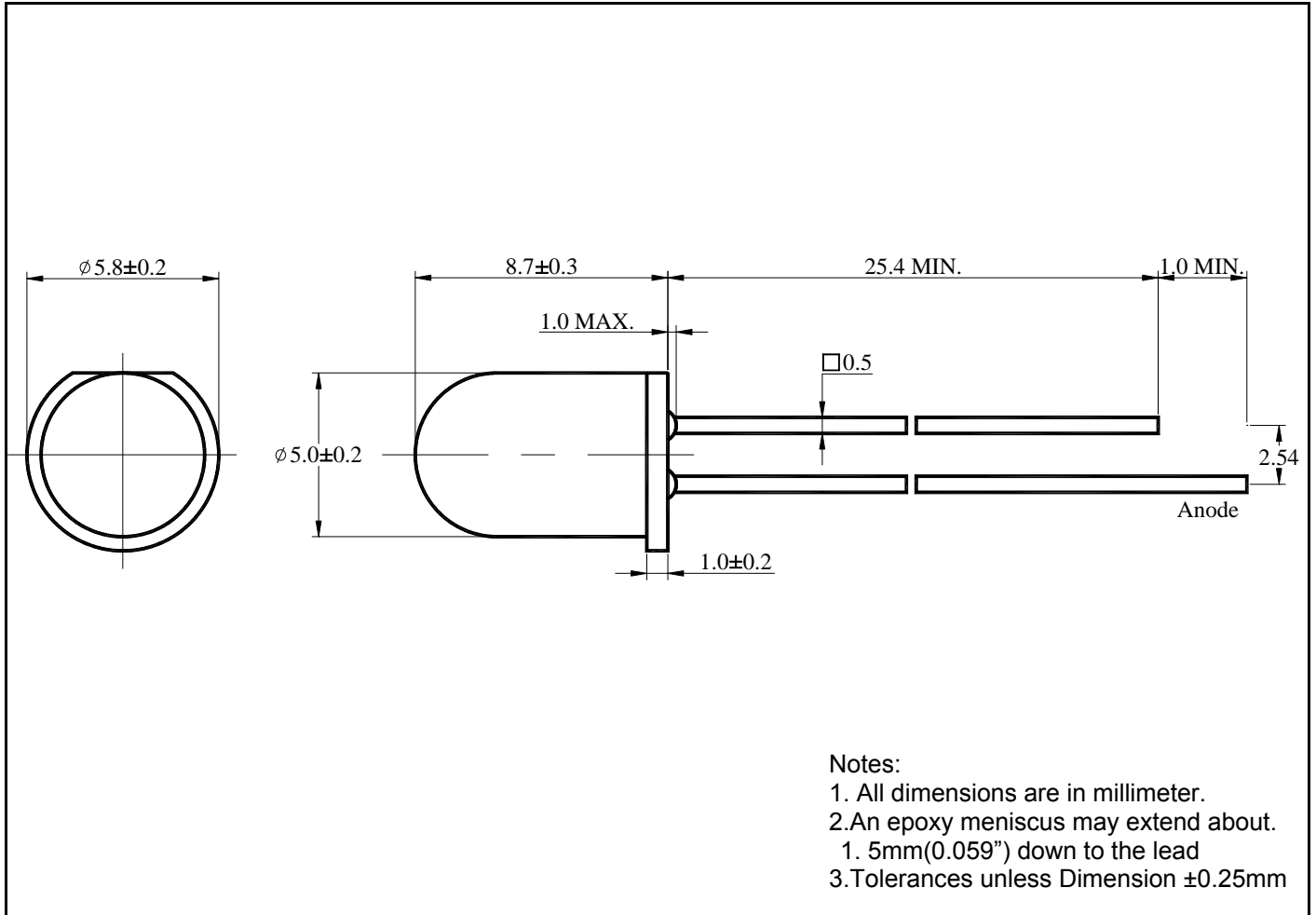
Diff No.002

5 mm

Round

Type : Phototransistor

■ Package Dimension:



■ Features :

- Choice of various viewing angles.
- Available on Tape and Reel.
- Reliable and robust.

■ Descriptions :

- The series is specially designed for application requiring higher brightness.
- The LED lamps are available with different color, intensities, epoxy colors etc.

■ Applications :

- TV set
- Monitor
- Telephone

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Part No.	55-611-0	Diff No.002
5 mm	Round	Type : Phototransistor

LED Parts P/N.	Chip		Lens Color
	Material	Emitted Color	
55-611-0	Silicon	Phototransistor	Water Claer

■ Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Power Dissipation	P_D	100	mW
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Collector Voltage	V_{ECO}	5	V
Operating Temperature	T_{opr}	-40 ~+85	°C
Storage Temperature	T_{stg}	-40 ~+85	°C
Soldering Temperature	T_{sol}	260±5	°C

■ Electronic Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Viewing Angle	2θ	1/2	30	1/2	Deg.	---
Collector-Emitter Breakdown Voltage	$V_{BR\ CEO}$	30	1/2	100	V	$I_C=100\mu A$ $I_B=0$
Emitter-Collector Breakdown Voltage	$V_{BR\ ECO}$	5	1/2	1/2	V	$I_E=100\mu A$ $I_B=0$
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	1/2	1/2	0.2	V	$I_C=2mA$ $I_B=100\mu A$
Collector Dark Current	I_{CEO}	1/2	1/2	100	nA	$V_{CE}=20V$ $H=0\text{ mW/cm}^2$
Rise Time (10% to 90%)	T_R	1/2	15	1/2	μS	$V_{CE}=5V$ $I_C=1mA$ $R_L=1000\Omega$
Fall Time (90% to 10%)	T_F	1/2	15	1/2		
Light Current	---	1/2	1.2	1/2	mA	$E_e=1\text{mW/cm}$
Dark Current	---	1/2	1/2	500	nA	$I_C=0.5mA$
Current Gain	H_{FE}	200	1/2	1/2	1/2	$V_{CE}=5V$ $I_C=2mA$
Collector-Base Capacitance	C_{CB}	5.4	6.4	7.4	PF	$F=1\text{MHZ}$ $V_{CB}=3V$