

GL710 Infrared Emitting Diode

APPLICATIONS:
 OA equipment
 Audio visual equipment
 Home appliances
 Telecommunication
 equipment (terminal)
 Measuring equipment
 Tooling machines
 Computers

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT	NOTE
Supply voltage	V_{CC}	0 to 6.0	V	
Forward current	I_F	50	mA	
Peak forward current	I_{FM}	400	mA	1
Operating temperature	T_{OPR}	-10 to + 70	°C	
Storage temperature	T_{STG}	-20 to +85	°C	
Soldering temperature	T_{SOL}	230	°C	2

NOTES:

1. Pulse width 90 μ s, duty ratio 0.25
2. For 3 s MAX. at the position of 1.6 mm from the resin edge.

ELECTRO-OPTICAL CHARACTERISTICS

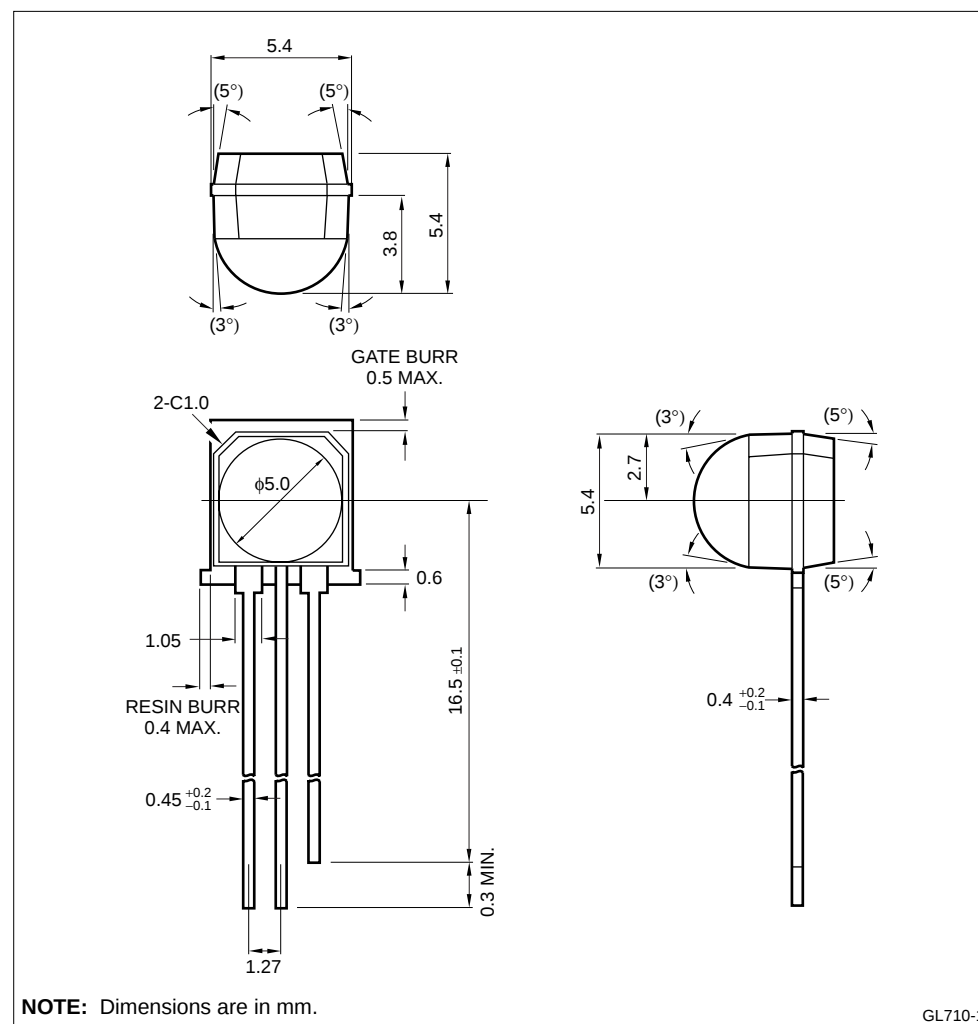
$T_A = 25^\circ\text{C}$

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS	NOTE
Peak forward voltage	V_{FM}		1.9		V	$I_{FM} = 0.3 \text{ A}$	
Reverse current	I_R			10	μA	$V_R = 3 \text{ V}$	
Radiant intensity	I_E	100	(140)	(300)	mW/sr	$I_{FM} = 0.3 \text{ A}$, $\phi \leq 15^\circ$	1
Peak emission wavelength	λ_p	850	880	900	nm	$I_F = 50 \text{ mA}$	
Spectrum radiation bandwidth	$\Delta\lambda$		40		nm	$I_F = 50 \text{ mA}$	
Half intensity angle	$\Delta\theta$		± 20		degrees	$I_F = 50 \text{ mA}$	
Rise time	t_r		15		ns	$I_F = 50 \text{ mA}$	
Fall time	t_f		15		ns	$I_F = 50 \text{ mA}$	

NOTE:

1. It is $\phi = 0^\circ$ in the direction of mechanical axis of lens portion.

MECHANICAL DIMENSIONS



IrDA is a registered name of the InfraRed Data Association.

FastFax Service: 1-800-833-9437

Product Information: 1-800-642-0261

World Wide Website: <http://www.sharpsma.com>



**SHARP Microelectronics
of the Americas
Regional Sales Offices**

North American
Headquarters

Camas, WA
Ph (360) 834-2500
Fax (360) 834-8903

West

Irvine, CA
Ph (714) 250-0225
Fax (714) 250-0438

San Jose, CA
Ph (408) 436-4900
Fax (408) 436-0924

Central

Romeoville, IL
Ph (708) 226-2400
Fax (708) 759-8572

Auburn Hills, MI
Ph (810) 377-9220
Fax (810) 377-9222

Austin, TX
Ph (512) 349-7262
Fax (512) 349-7002

DFW Airport, TX
Ph (214) 574-5205
Fax (214) 456-0360

Houston, TX
Ph (713) 955-9909
Fax (713) 955-9910

East

Burlington, MA
Ph (617) 270-7979
Fax (617) 229-9117

Annadale, NJ
Ph (908) 713-0505
Fax (908) 713-0566

Durham, NC
Ph (919) 941-0065
Fax (919) 941-0066

Distributors

Future Electronics
Canada
Ph (514) 694-7710
Fax (514) 695-3707

Marshall Industries
El Monte, CA
Ph (800) 522-0084
Fax (818) 307-6173
URL <http://www.marshall.com>

Milgray
Farmindale, NY
Ph (800) MILGRAY (645-4729)
Fax (516) 293-6465

Reptron
Tampa, FL
Ph (800) 659-1361
Fax (813) 854-2351

Sterling Electronics Corp.
Houston, TX
Ph (800) 745-5500
Fax (713) 629-3939

SHARP
FROM SHARP MINDS
COME SHARP PRODUCTS™