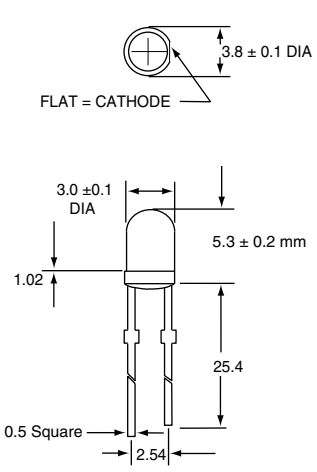
INFRARED LEDS

FEATURES:

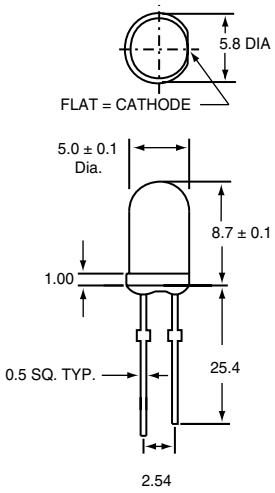
- High Radiant Intensity
- Emission angle suitable for remote control
- Colorless plastic molded lens
- Comaptible with PIN Silicon Photo Diodes HPD711/712/726

USES:

- Remote Control for Photo Sensor
- Optical Switch



HIR303C/B



HIR305C/B

Maximum Ratings (T_a=25˚)

Forward Current (I_{FM}) = 100mA
Pulse Forward Current (I_{FPM}) = 1A (1)
Reverse Voltage (V_R) = 5V
Power Dissipation (P_M) = 150mW
Operating Temperature Range (T_{OP}) = -20 to +85˚C
Storage Temperature (T_{ST}) = -40 to + 100˚C
Soldering Temperature (T_{SOL})= 260˚C (2)

(1): f=1KHz, tp/T≤1%
(2): tp/T≤3s, up to 4mm from the body of the device.

Optoelectric Characteristics (T_a=25˚C)

PARAMETER	Unit	Test Condition	HIR303C/B.			HIR305C/B		
			Min.	Typ.	Max.	Min.	Typ.	Max.
Forward Voltage (V_F)	V	I_F = 50mA	-	1.3	1.5	-	1.3	1.5
Pulse Forward Voltage (V_{FP})	V	I_{FP}=1A t_P = 10μS	-	-	5	-	-	5
Reverse Current (I_R)	μA	V_R = 5V	-	-	50	-	-	50
Light Output Power (P_O)	mW	I_F=50mA	-	7.5	-	-	7.5	-
Radiant Intensity (I_E)	mW/sr	I_F=50mA	-	-	18	-	-	18
Peak Emission Wavelength (λ_P)	nm	I_F=50mA	-	945	-	-	945	-
Spectral Line Half Width (Δ/λ)	nm	I_F=50mA	-	45	-	-	45	-
Emission Angle of Half Intensity ($\Theta/2$)	o	I_F=50mA	-	20	-	-	30	-
Junction Capacitance (C_i)	pF	V_R=1 f=1MHz	-	50	-	-	50	-
Switch Time (T_r / Tf)	μs	I_{FP}=100mA	-	1	-	-	1	-
		f=1KHz t_P/T= 1%	-	1	-	-	1	-