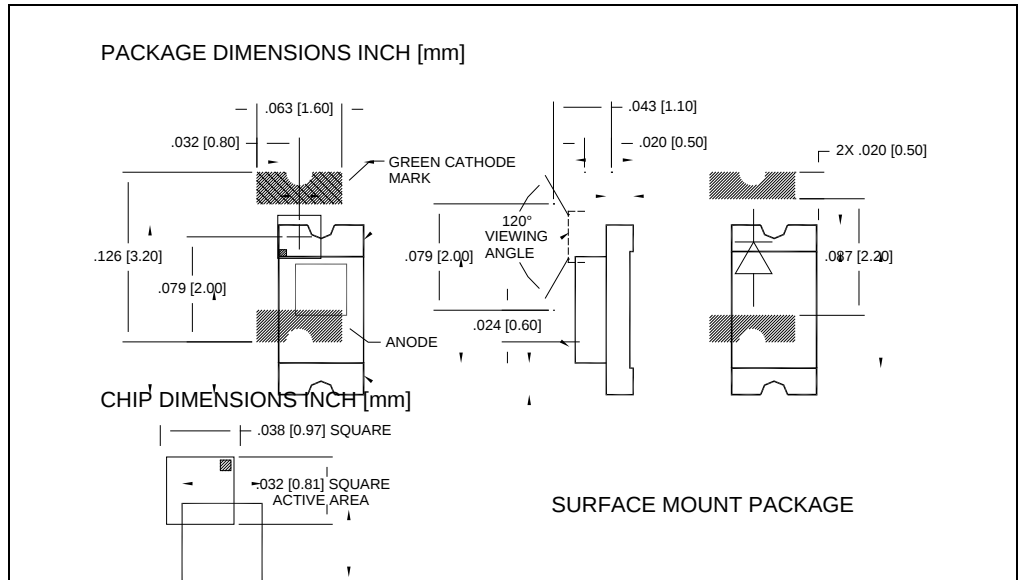
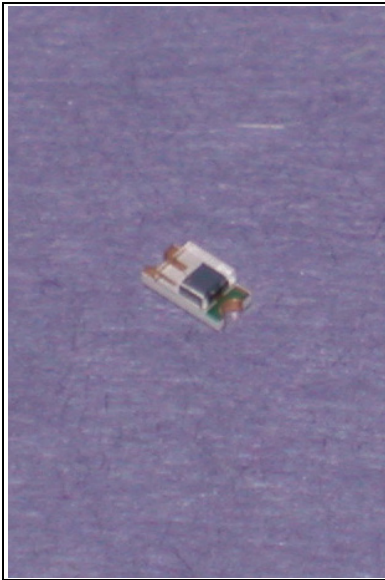




DESCRIPTION

The **PDB-C152SM** is a blue enhanced PIN silicon photodiode in a photoconductive mode packaged in a water clear surface mount package.

FEATURES

- Surface Mount
- Photoconductive
- High Speed
- Low cost

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

APPLICATIONS

- Industrial Controls
- Opto Switches
- Opto Counters



ABSOLUTE MAXIMUM RATINGS

SYMBOL	MIN		MAX	UNITS	
Reverse Voltage	-	-	50	V	$T_a = 23^{\circ}\text{C}$ UNLESS OTHERWISE NOTED
Storage Temperature	-40	-	+125	$^{\circ}\text{C}$	-
Operating Temperature	-40	to	+80	$^{\circ}\text{C}$	-
Soldering Temperature*	-	-	+240	$^{\circ}\text{C}$	-

* 1/16 inch from case for 3 seconds max.

OPTO-ELECTRICAL PARAMETERS

$T_a = 23^\circ\text{C}$ UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Short Circuit Current	$H = 100 \text{ fc}$, 2850 K	8	10	-	μA
Dark Current	$V_R = 10 \text{ V}$	-	2	10	nA
Shunt Resistance	$V_R = 10 \text{ mV}$	500	-	-	G Ω
Junction Capacitance	$V_R = 10 \text{ V}$; $f = 1 \text{ MHz}$	-	15	20	pF
Spectral Application Range	Spot Scan	400	-	1100	nm
Breakdown Voltage	$I = 10 \mu\text{A}$	50	100	-	V
Noise Equivalent Power	$V_R = 10 \text{ V}$ @ $\lambda = \text{Peak}$	-	1.5×10^{-13}	-	$\text{W}/\sqrt{\text{Hz}}$
Response Time**	$R_L = 1 \text{ K}\Omega$, $V_R = 50 \text{ V}$	-	50	-	nS

**Response time of 10% to 90% is specified at 660nm wavelength light.

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

