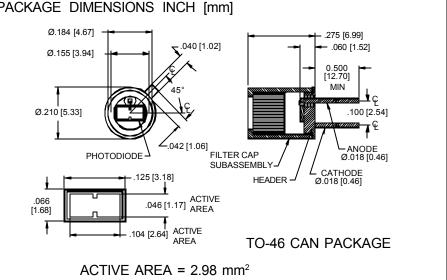
PHOTONIC
Silicon Photodiode, Filter Combination Photoconductive
DETECTORS INC.600 nm (red color) Type PDV-C403-46



PACKAGE DIMENSIONS INCH [mm]



RESPONSIVITY (A/W)

FEATURES

- 600 nm CWL
- 65 nm FWHM
- Low noise
- The **PDV-C403-46** is a silicon, PIN planar diffused, photodiode with a red color 600 nm +/- 2 nm CWL wide band interference filter and a wide 65 nm half bandwidth. Ideal for photometry and radiometry measurment applications.

APPLICATIONS

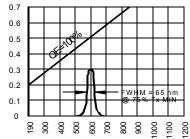
- Red color matching
- Color meters
- Film processing

ABSOLUTE MAXIMUM RATING (TA=25°C unless otherwise noted)

DESCRIPTION

| SYMBOL | PARAMETER | MIN | MAX | UNITS |
|------------------|-----------------------------|-----|------|------------|
| Vbr | Reverse Voltage | | 100 | V |
| T _{STG} | Storage Temperature | -20 | +85 | $^{\circ}$ |
| To | Operating Temperature Range | -15 | +70 | °C |
| Ts | Soldering Temperature* | | +240 | Ŷ |
| Ι | Light Current | | 500 | mA |

SPECTRALRESPONSE



WAVELENGTH(nm)

*1/16 inch from case for 3 secs max

ELECTRO-OPTICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

| SYMBOL | CHARACTERISTIC | TESTCONDITIONS | MIN | TYP | MAX | UNITS | | | | |
|--------|--------------------------|---------------------------------|-----|-----------------------|-----|-------------------|--|--|--|--|
| lsc | Short Circuit Current*** | H = 100 fc, 2850 K | 40 | 45 | | μ A | | | | |
| ΙD | Dark Current | H = 0, V _R = 10 V | | .15 | 1.0 | nA | | | | |
| Rsh | Shunt Resistance | H = 0, V _R = 10 mV | .5 | 1.0 | | GΩ | | | | |
| TC RSH | RsH Temp. Coefficient | H = 0, V _R = 10 mV | | -8 | | % / ℃ | | | | |
| CJ | Junction Capacitance | H = 0, V _R = 10 V** | | 10 | | pF | | | | |
| CWL | Center Wavelength | (CWL, λ o) +/- 2 nm | | 600 | | nm | | | | |
| HBW | Half Bandwidth | (FWHM) | | 65 | | nm | | | | |
| Vbr | Breakdown Voltage | I = 10 μA | 70 | 100 | | V | | | | |
| NEP | Noise Equivalent Power | V _R = 10 V @ Peak | | 1.5x10 ⁻¹⁴ | | W/√ ^{Hz} | | | | |
| tr | Response Time | RL = 1 KΩ V _R = 50 V | | 10 | | nS | | | | |

Information in this technical data sheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.**f=1 MHz, *** without filter [FORM NO. 100-PDV-C403-46 REVN/C]