

# DT Series

## Features

- Planar Diffused
- Oxide Passivated
- Guard Ring Construction
- Wide Spectral Range
- Low Noise
- Large Area
- Fast Rise Time
- Wide Dynamic Range

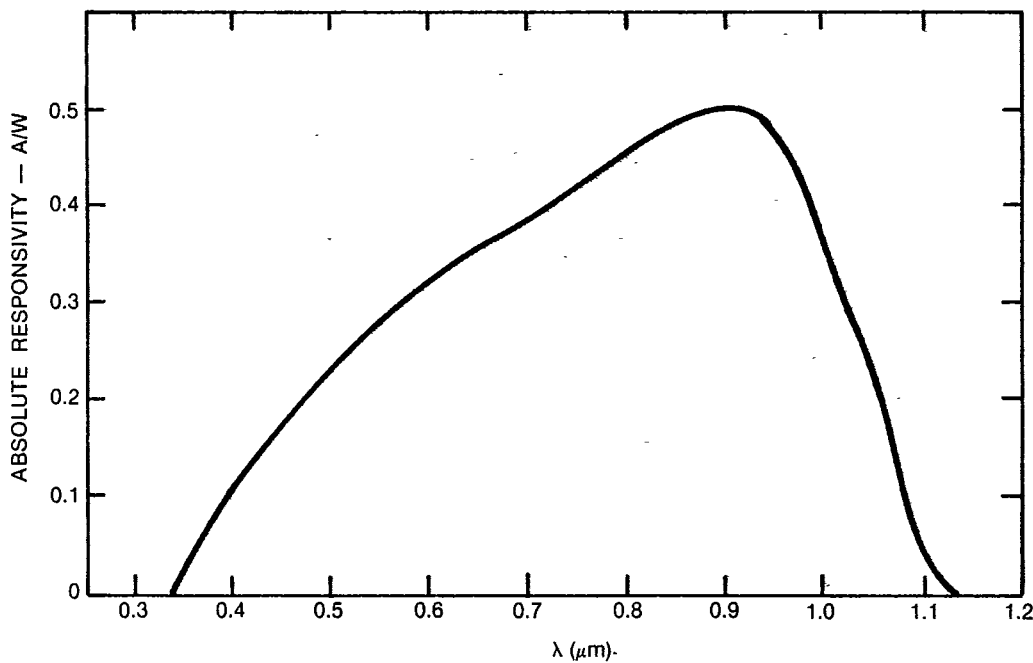
## Operating Data and Specifications at 23°C: Typical Performance at 100 V Bias

Characteristic	DT-25	DT-110	Units
Active Area	5.1	100	Sq. mm
Spectral Range	← 400-1150 →		nm
Responsivity	>0.5	>0.5	A/W at 900 nm
Bandwidth	45	45	MHz into 50 ohms
Rise Time	5	10	nS into 50 ohms
Operating Voltage	0-180	0-180	V
Breakdown Voltage <sup>1</sup>	>200	>200	V
Capacitance	4	70	pF
Dark Current	<30	<400	nA
Channel Resistance	3	1	Megohms
Series Resistance	800	50	Ohms
Noise Current	1	4	10 <sup>-13</sup> A/Hz <sup>1/2</sup> at 1 KHz
NEP (900,10 MHz,1)	2	8	10 <sup>-13</sup> W/Hz <sup>1/2</sup>
Response Linearity	>1%	>1%	
Operating Temperature	← -55 to +125 →		°C
Package Style	TO-5	TO-36	

### Notes

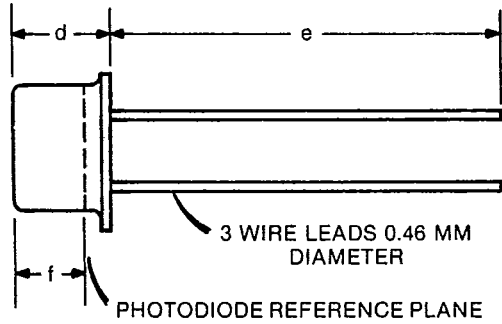
1. Breakdown voltage measured at 100 microamps dark current.

## Typical Spectral Response



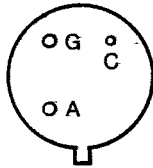
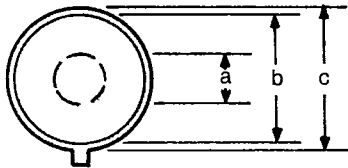
**Mechanical Data and Pin Configurations**

**DT-25**



Dimension (mm)	DT-25	DT-110
a (Active Dia.)	2.5	11.3
b	8.4	27.9
c	9.1	31.8
d	4.2	7.1
e	>19.0	12.3
f	2.3	5.7
Pin Circle Radius	2.5	9.5
Window Thickness	1.3	1.6
Window Diameter	6.1	1.0

Gold plated kovar leads and base window — Corning 7052 glass.



C - Common Anode  
A - Active Cathode  
G - Guard Ring Cathode

**DT-110**

