



**OptoSupply**

*Light It Up*

**Current Regulative Diode (TO92)**

**OSCRDT118**

**VER A.1**

## CURRENT REGULATIVE DIODE (CRD)

## ■Outline Dimension

- CRD is a diode which supplies constant current to an electric circuit, when power supply voltage fluctuations or load impedance fluctuations occur.
- CRD is used for current stabilization and current limiting.
- CRD is offered on TO-92

### ■Features

- Robust Power Package:460mW
- Wide Operating Voltage Range
- Immediate Turn-On
- Voltage Surge Suppressing – Protecting LEDs

### ■Absolute Maximum Rating (Ta=25°C)

Item	Symb ol	Value	Unit
Input Voltage	V <sub>F</sub>	24	V
Junction Temperature	T <sub>j</sub>	125	°C
Storage Temperature	T <sub>stg</sub>	-40~ +125	°C
Collector Dissipation	P <sub>c</sub>	0.75*2	W

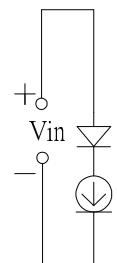
### ■Electrical -Optical Characteristics (Ta=25°C)

Part Number	Lens Color	Constant Current(I <sub>H</sub> )		Turn-on voltage(V <sub>k</sub> )		.Limiting ratio (K <sub>c</sub> )	Withstand Voltage (V)
		I <sub>H</sub>	Voltage(v)	V <sub>k</sub> (V)	I <sub>k</sub> ( MA)		
OSCRDT118	Black Lens	16-19	10	≤3.5	≤0.8I <sub>H</sub>	≤1.1	>70

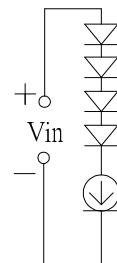
### ■Application

- Automobile: Chevron Side Mirror Markers, Cluster, Display & Instrument Backlighting, CHMSL, Map Light
- DC Lighting Panels, Display Signage, Decorative Lighting, Channel Lettering
- Switch Contact Wetting

### ■Application Information



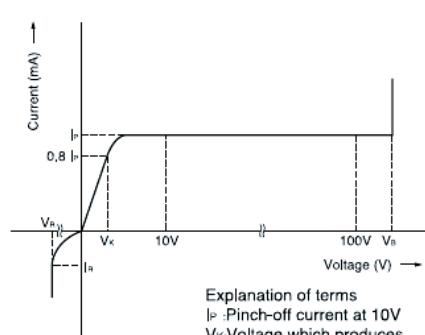
Single LED



Multi- LEDs



### ■Basic characteristics



Explanation of terms  
 I<sub>p</sub>:Pinch-off current at 10V  
 V<sub>k</sub>:Voltage which produces 0.8I<sub>p</sub> or greater current  
 V<sub>B</sub>:Breakdown voltage  
 I<sub>R</sub>:Permitted reverse current

## LED & Application Technologies

