



Description

The open LED protector provides a switching electronic shunt path when an LED in an LED array fails as an open circuit. This ensures that the entire array of LEDs will continue to function even if a single LED in the array does not.

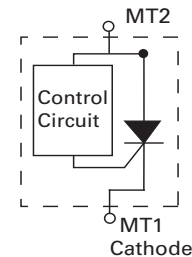
This provides higher reliable lighting functions in applications such as headlights, aircrafts, aircraft runway lighting, Road side warning lights, etc.

This device is compatible with one, two and Three watt LEDs that have a nominal 3V forward characteristic.

Dimensions SMA/DO-214AC



Schematic Symbol



Features & Benefits

Fast switching

Automatically resets after power cycle

Compatible with industrial lighting environments

Compatible with PWM frequencies up to 30 kHz

RoHS compliant and halogen-free

Electrical Characteristics (TA=25°C unless otherwise specified)

Part Number	Device Marking	V _{DRM}	I _{DRM}	V _{BR}	I _S	I _T	V _T	I _H	Critical rate of rise dV/dt
		Min (V)	Max μA	Max (V)	Max (mA)	Max (A)	Max (V)	Min(mA)	
PLED06A	PLED06B	6.0	10	15	600	1	1.5	5	250V/μs

General Notes:


- ◆ All measurements are made at an ambient temperature of 25°C. I_{pp} applies to -40°C through +85°C temperature range.
- ◆ Special voltage (V_{BO} and V_{DRM}) and holding current (I_H) requirements are available up on request.

Electrical Parameters (T_{amb}=25°C)

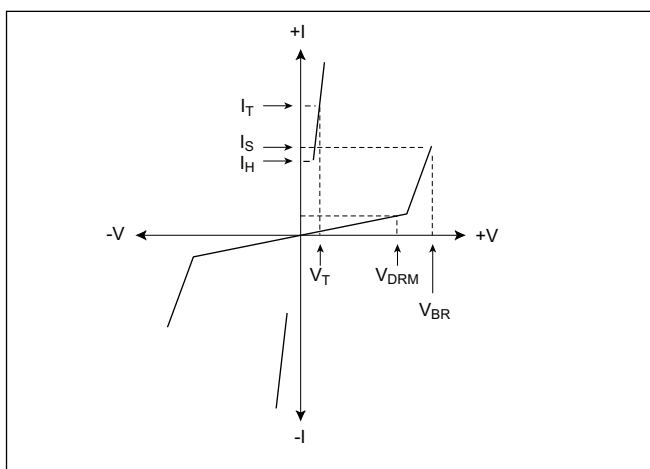
Symbol	Parameter	Symbol	Parameter
V _{DRM}	Stand-off voltage is measured at I _{DRM}	I _H	Holding current
I _{DRM}	Leakage current is measured at V _{DRM}	V _T	ON-state current
V _{BR}	Break over voltage is measured at 100V/μs	I _T	ON-state voltage
I _S	Bread over current		



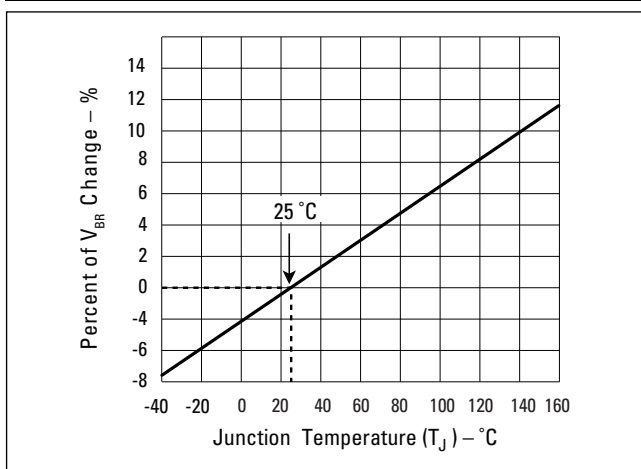
Thermal Considerations

Package	Symbol	Parameter	Value
DO-214	T _J	Operating Junction Temperature Range	-40 to +150°C
	T _S	Storage Temperature Range	-40 to +150°C
	R _{θJA}	Thermal Resistance: Junction to Ambient	90 °C/W

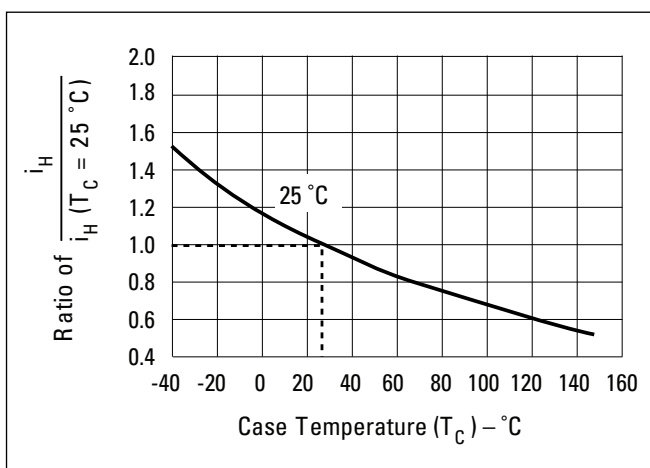
V-I Characteristics



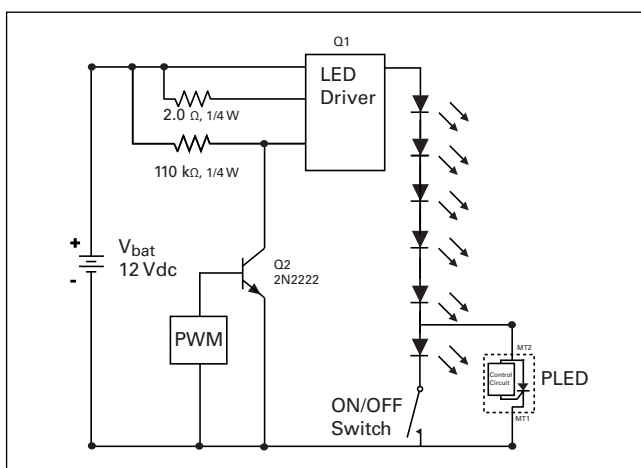
V_{BR} vs. Junction Temperature



Normalized DC Holding Current vs. Case Temperature



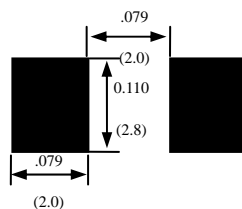
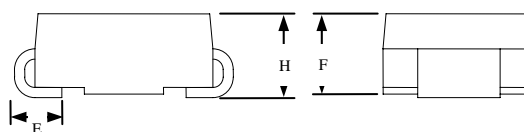
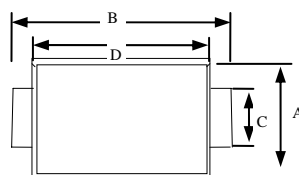
LED Interference Test Circuit





Product Dimensions

Dimension	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.098	0.114	2.50	2.90
B	0.188	0.208	4.80	5.28
C	0.055	0.062	1.40	1.60
D	0.157	0.181	4.00	4.60
E	0.030	0.060	0.76	1.52
F	0.078	0.096	2.00	2.44
H	0.080	0.104	2.051	2.643



Summary of Packing Options

Package Type	Description	Packing Quantity	Industry Standard
DO-214AC(SMA)	Embossed Carrier Reel Pack	5000PCS	EIA-481-D

