

BIDIRECTIONAL TVS DIE

APPLICATIONS

- LEDs

FEATURES

- Compatible with IEC 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- Available in 5.0V
- Bidirectional Configuration and Monolithic Structure
- Protection for 1 Line
- RoHS Compliant
- REACH Compliant

PIN CONFIGURATION



MECHANICAL CHARACTERISTICS

- Lead-Free Plating
- Solder Reflow Temperature:
 - Lead-Free - Sn/Ag/Cu, 96/3.5/0.5: 260-270°C
- Flammability Rating UL 94V-0
- Thickness 4 mils
- Metalization: Top Metal - Ni/Au

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM LEAKAGE CURRENT (Note 1) @ V_{WM} I_D μA	TYPICAL CAPACITANCE @0V, 1MHz C pF
PLED05F189	5.0	6.0	10	10

NOTES

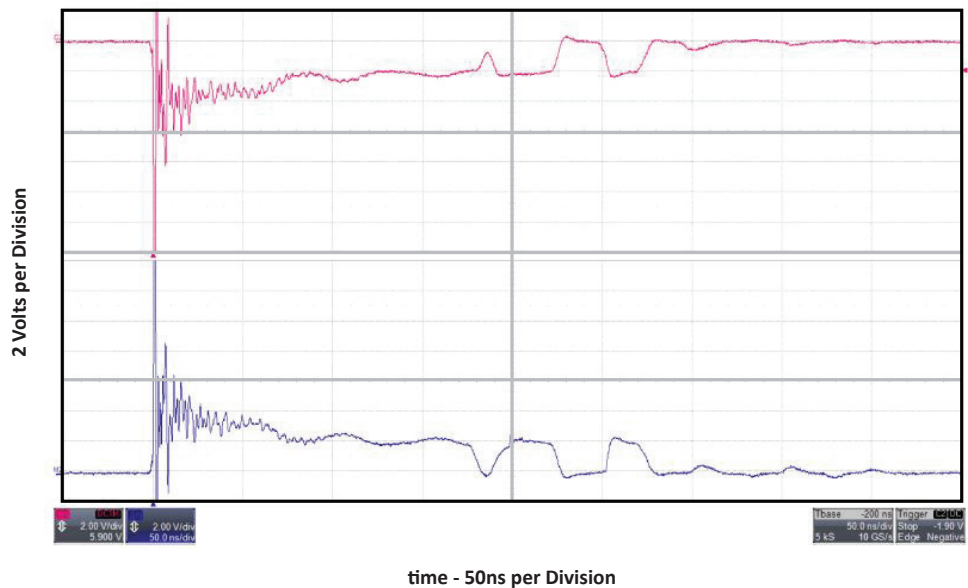
1. Maximum leakage current < 500nA @ 3.3V.

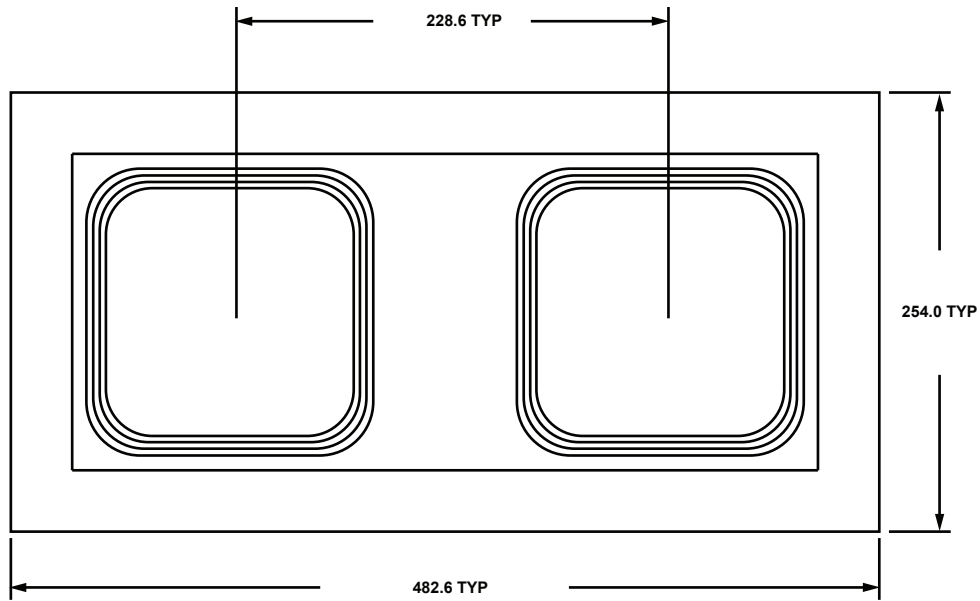
MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Operating Temperature	T_A	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C

TYPICAL DEVICE CHARACTERISTICS

FIGURE 3
8kV POSITIVE & NEGATIVE ESD CLAMPING WAVEFORM



MASK OUTLINE

Controlling Dimension: Microns

COMPANY INFORMATION

COMPANY PROFILE

In business more than 20 years, ProTek Devices™ is a privately held semiconductor company. The company offers a product line of overvoltage protection and overcurrent protection components. These include transient voltage suppressor array (TVS arrays) avalanche breakdown diode, steering diode TVS array and electronics SMD chip fuses. These components deliver circuit protection in electronic systems from numerous overvoltage and overcurrent events. They include lightning; electrostatic discharge (ESD); nuclear electromagnetic pulses (NEMP); inductive switching; and electromagnetic interference (EMI) / radio frequency interference (RFI). ProTek Devices also offers high performance interface and linear products. They include analog switches; multiplexers; LED drivers; LED wafer die for ESD protection; audio control ICs; RF and related high frequency products.

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