

TYPICAL DEVICE CHARACTERISTICS

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 |
| Peak Pulse Power ($t_p = 8/20\mu s$) - See Figure 1 | P_{PP} | 250 | Watts |
| Peak Pulse Current ($t_p = 8/20\mu s$) | I_{PP} | 16 | A |
| Soldering Temperature for 10 seconds | T_L | 265 | °C |

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

| PART NUMBER | DEVICE MARKING | RATED STAND-OFF VOLTAGE V_{WM} VOLTS | MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS | TYPICAL FORWARD VOLTAGE @10mA V_F VOLTS | MAXIMUM CLAMPING VOLTAGE (Fig. 2) @ $I_p = 5A$ V_C VOLTS | MAXIMUM CLAMPING VOLTAGE (Fig. 2) @ $I_p = 16A$ V_C VOLTS | MAXIMUM LEAKAGE CURRENT @ V_{WM} I_D μA | TYPICAL CAPACITANCE @0V, 1MHz C pF |
|-------------|----------------|--|---|--|---|--|---|---|
| PLW0501P | K | 5.0 | 6.0 | 0.8 | 9.8 | 12.5 | 5 | 120 |

TYPICAL DEVICE CHARACTERISTICS

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

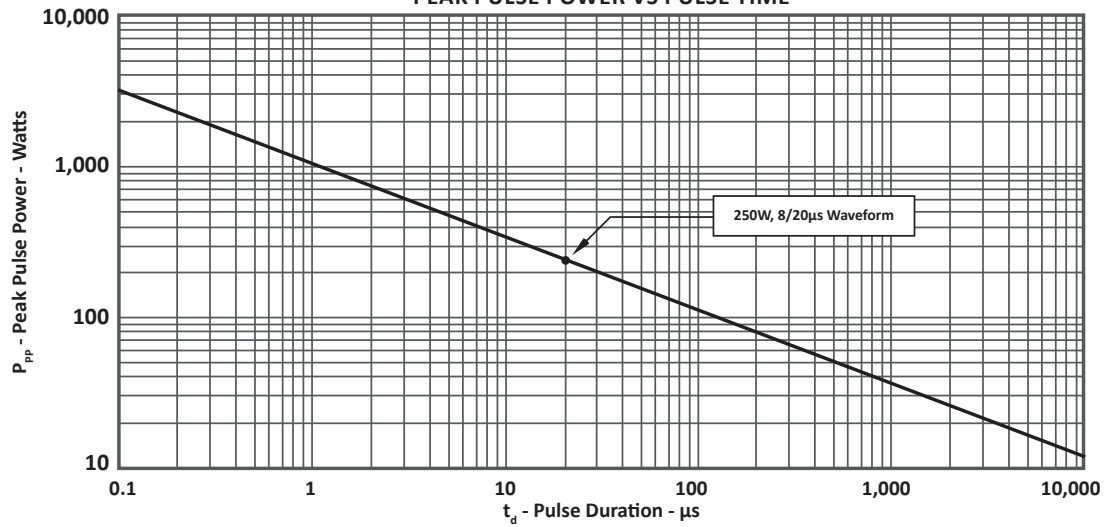
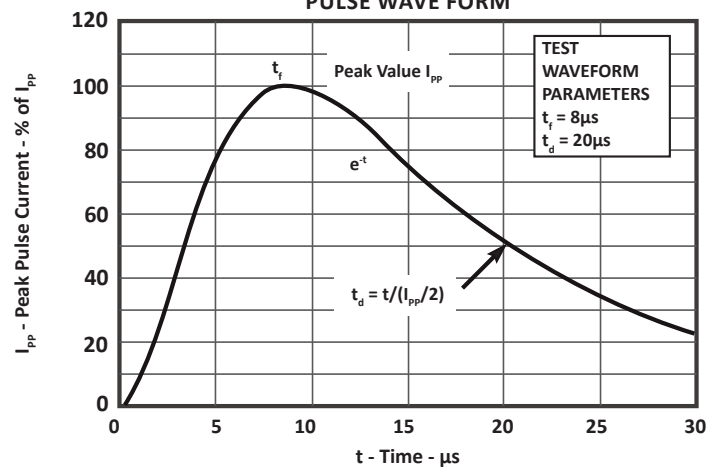


FIGURE 2
PULSE WAVE FORM



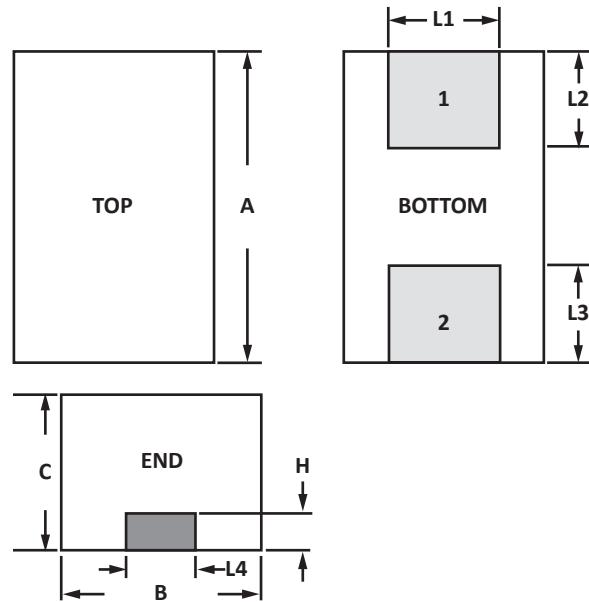
DFN-2-0402 PACKAGE INFORMATION

OUTLINE DIMENSIONS

| DIM | MILLIMETERS | | INCHES | |
|-----|-------------|------|--------|-------|
| | MIN | MAX | MIN | MAX |
| A | 0.99 | 1.04 | 0.039 | 0.041 |
| B | 0.58 | 0.64 | 0.023 | 0.025 |
| C | 0.43 | 0.48 | 0.017 | 0.019 |
| H | 0.13 | 0.18 | 0.005 | 0.007 |
| L1 | 0.28 | 0.33 | 0.011 | 0.013 |
| L2 | 0.23 | 0.28 | 0.009 | 0.011 |
| L3 | 0.23 | 0.28 | 0.009 | 0.011 |
| L4 | 0.18 | 0.23 | 0.007 | 0.009 |

NOTES

1. Dimensioning and tolerances per ANSI Y14.M, 1985.
2. Controlling dimension: inches.

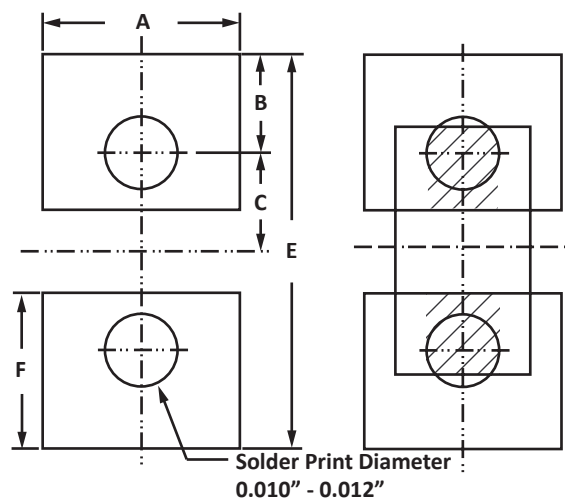


PAD LAYOUT DIMENSIONS

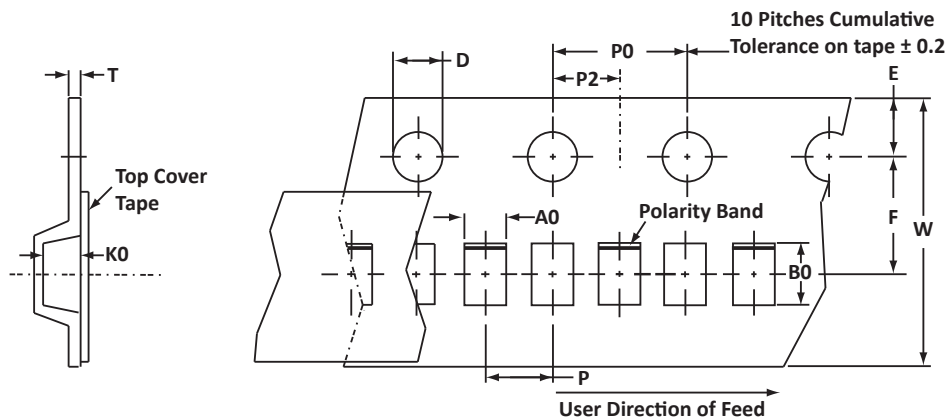
| DIM | MILLIMETERS | | INCHES | |
|-----|-------------|-------|--------|-------|
| | MIN | MAX | MIN | MAX |
| A | 0.737 | 0.787 | 0.029 | 0.031 |
| B | 0.331 | 0.381 | 0.013 | 0.015 |
| C | 0.356 | 0.406 | 0.014 | 0.016 |
| E | 1.423 | 1.523 | 0.056 | 0.060 |
| F | 0.534 | 0.584 | 0.021 | 0.023 |

NOTES

1. Controlling dimension: inches.
2. Decimal tolerances for mounting pad: $\pm 0.003''$ (± 0.08 mm).



TAPE AND REEL



SPECIFICATIONS

| REEL DIA. | TAPE WIDTH | A0 | B0 | K0 | D | E | F | W | P0 | P2 | P | tmax |
|------------|------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------|
| 178mm (7") | 8mm | 0.70 ± 0.05 | 1.15 ± 0.05 | 0.60 ± 0.003 | 1.55 ± 0.10 | 1.75 ± 0.10 | 3.50 ± 0.05 | 8.00 ± 0.30 | 4.00 ± 0.10 | 2.00 ± 0.05 | 2.00 ± 0.05 | 0.25 |

NOTES

1. Dimensions are in millimeters.
2. Surface mount product is taped and reeled in accordance with EIA-481.
3. Empty pocket beneath sprocket holes.
4. Polarity Band on unidirectional devices only.
5. Suffix - T73 = 7" Reel - 3,000 pieces per 8mm tape (sprocket hole skipped).
6. Marking on Part - marking code (see page 2) and polarity band.

Package outline, pad layout and tape specifications per document number 06094.R1 3/11 - Option 1.

ORDERING INFORMATION

| BASE PART NUMBER | LEADFREE SUFFIX | TAPE SUFFIX | QTY/REEL | REEL SIZE | TUBE QTY |
|------------------|-----------------|-------------|----------|-----------|----------|
| PLW0501P | -LF | -T73 | 3,000 | 7" | n/a |

This device is only available in a Lead-Free configuration.

COMPANY INFORMATION

COMPANY PROFILE

In business more than 25 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 LED wafer die for ESD protection and related high frequency products. ProTek Devices is ISO 9001:2015 certified.

CONTACT US

Corporate Headquarters

2929 South Fair Lane
Tempe, Arizona 85282
USA

By Telephone

General: 602-431-8101
Sales: & Marketing: 602-414-5109
Customer Service: 602-414-5114
Product Technical Support: 602-414-5107

By Fax

General: 602-431-2288

By E-mail:

Asia Sales: asiasales@protekdevices.com
Europe Sales: europesales@protekdevices.com
U.S. Sales: ussales@protekdevices.com
Distributor Sales: distysales@protekdevices.com
Customer Service: service@protekdevices.com
Technical Support: support@protekdevices.com

ProTek Devices (Asia Pacific) Pte. Ltd.

8 Ubi Road 2, #06-19
Zervex
Singapore - 408538
Tel: +65-67488312
Fax: +65-67488313

Web

www.protekdevices.com

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