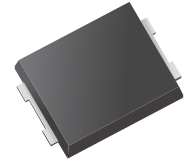




## Thyristor Surge Suppressor

### Features

- Excellent capability of absorbing transient surge
- Quick response to surge voltage (nS Level)
- Eliminates overvoltage caused by fast rising transients
- Moisture sensitivity level: level 1
- Non degenerative
- Bi-directional
- Lead free in comply with EU RoHS 2011/65/EU directives



### Mechanical Data

- Case: PDFN7656
- Lead Material: Copper Alloy
- Terminal Finish: 100% Matte-Tin Plated
- Approx. Weight: 0.183g

### Application

- AC Port
- RJ11

### Ordering Information

Part Number	Marking	Shipping	Reel
LTP2600HP7	260PH	3000PCS Tape&Reel	13 inchs

### Environmental Characteristics

Testing Items	Technical Standards
High Temperature Reverse Bias Test	Temperature: 150±3°C, Bias=80%V <sub>DRM</sub> Time: 168H
High Temperature Life Test	Temperature: 150°C Time: 168H
High-low Temperature Cycle Test	Temperature: From -40°C to 150°C Dwell time: 30min, 100 cycles
High Temperature & High Humidity Test	Temperature: 85°C Humidity: 85% Test time: 168H
Pressure Cooker Test	Temperature: 121°C, 2atm. Humidity: 100% Test time: 96H
Resistance of Soldering Heat	Temperature: 260±5°C Time of dip soldering: 10s, 3times

## Part Number and Electrical Parameter

Part Number	I <sub>DRM</sub> @ V <sub>DRM</sub>		V <sub>S</sub> @ I <sub>S</sub>		V <sub>T</sub> @ I <sub>T</sub>		I <sub>H</sub>		C <sub>o</sub>		
	μA	V	V	mA	V	A	mA	mA	pF		
	Max		Max		Max		Min	Max	Min	Typ	Max
LTP2600HP7	5	220	300	800	4	2.2	5	50	160	185	220

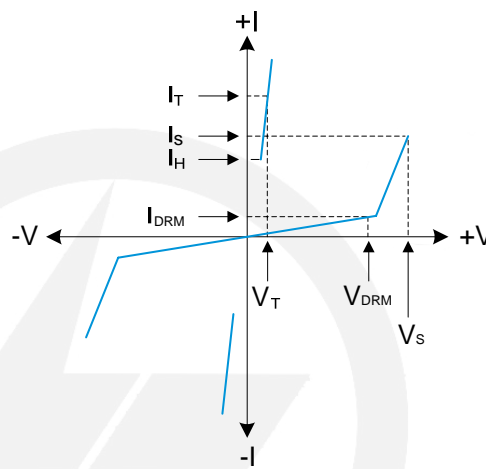
Absolute maximum ratings measured at TA= 25°C RH = 45%-75% (unless otherwise noted).

V<sub>S</sub> is measured at 100KV/S

Off-state Capacitance is measured at V<sub>DC</sub>=2V, V<sub>RMS</sub>=1V, f=1MHz

## Electrical Parameters

Symbol	Parameter
V <sub>DRM</sub>	Peak off-state voltage
I <sub>DRM</sub>	Off-state current
V <sub>S</sub>	Switching voltage
I <sub>S</sub>	Switching current
V <sub>T</sub>	On-state voltage
I <sub>T</sub>	On-state current
I <sub>H</sub>	Holding current
C <sub>o</sub>	Off-state capacitance



## Surge Ratings

Current Waveform	Voltage Waveform	I <sub>pp</sub>
8/20μs	1.2/50μs	Min : 1500A
di/dt	/	Min : 1500A/μs

## Thermal Considerations

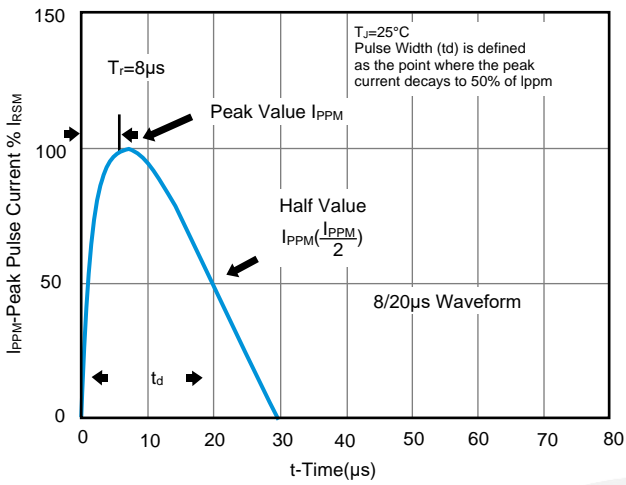
Symbol	Parameter	Value	Unit
T <sub>J</sub>	Operating Junction Temperature Range	-40 to +150	
T <sub>S</sub>	Storage Temperature Range	-60 to +150	
R <sub>θJA</sub>	Thermal Resistance: Junction to Ambient	90	/W

## Product Characteristics

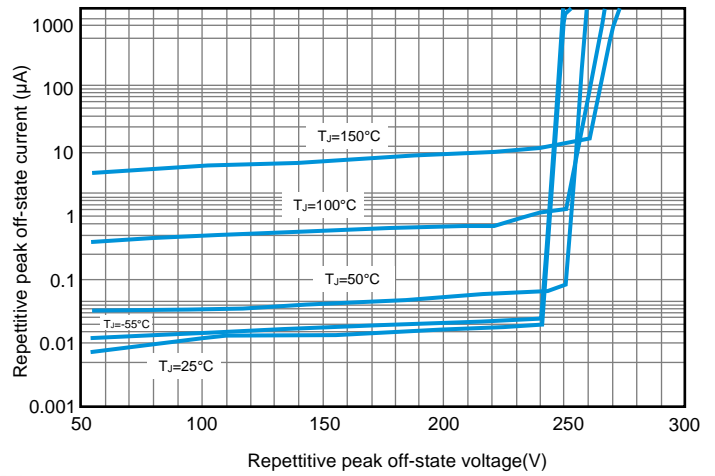
Lead Material	Terminal Finish
Copper Alloy	100% Matte-Tin Plated

**Characteristics Curves**

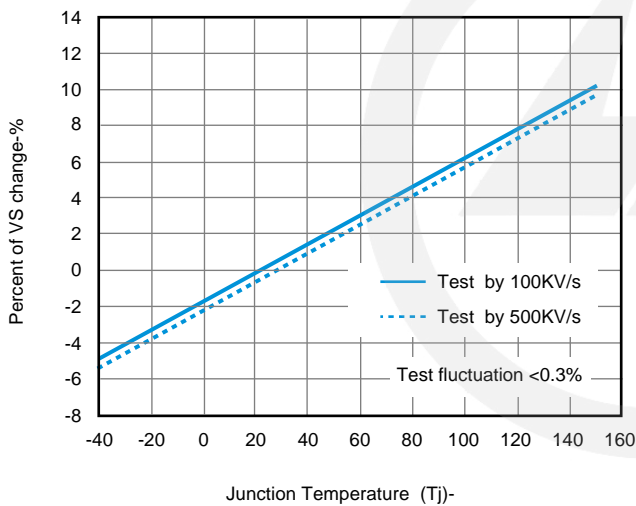
**Fig.1 Pulse Wavaform**



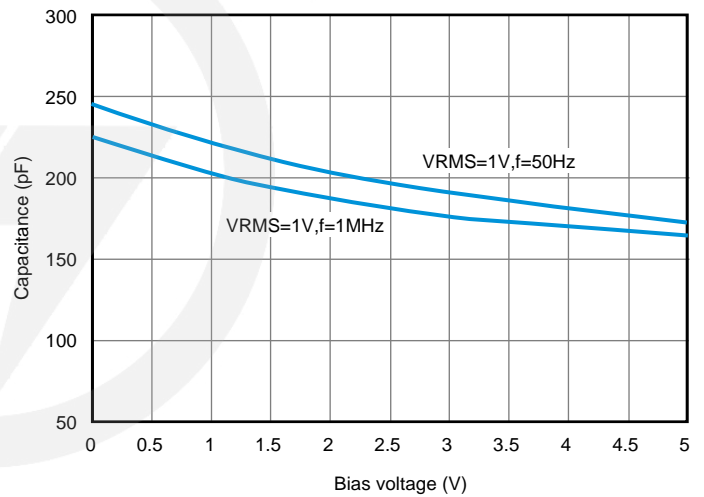
**Fig.2 Repetitive peak off-state current VS Repetitive peak off-state voltage**



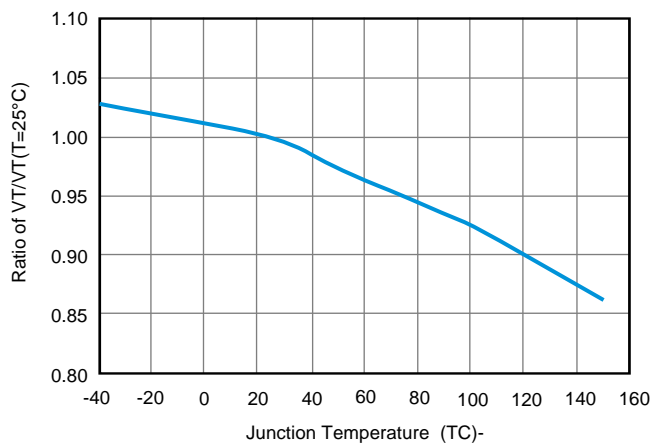
**Fig.3 VS change vs Junction Temperature**



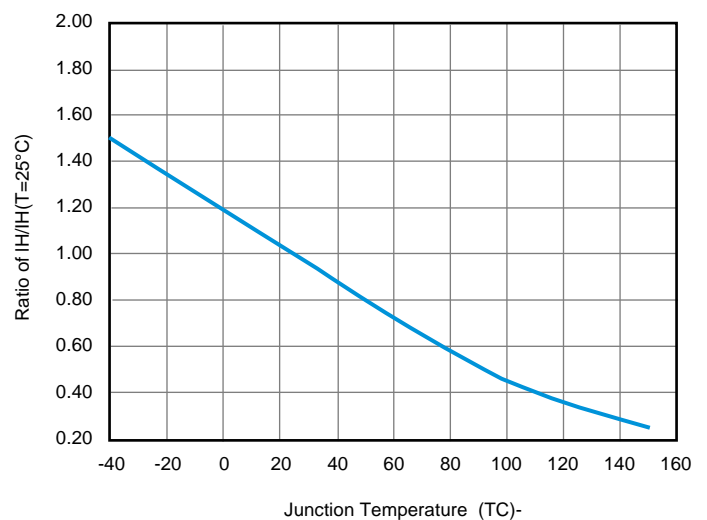
**Fig.4 Capacitance vs Bias voltage**

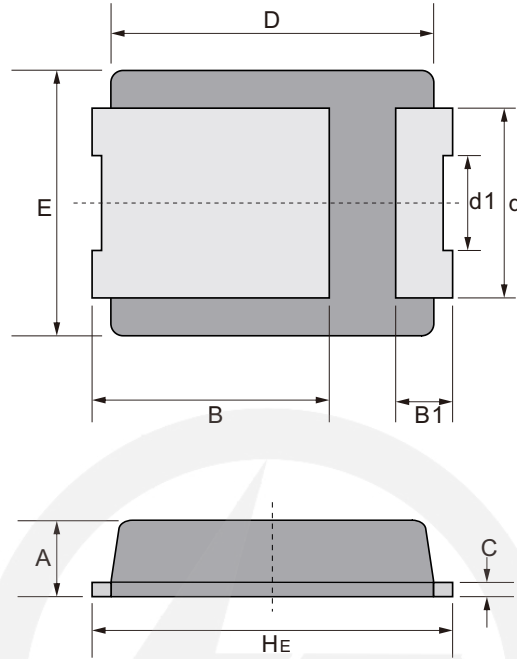


**Fig.5 On-state Voltage vs Junction Temperature**

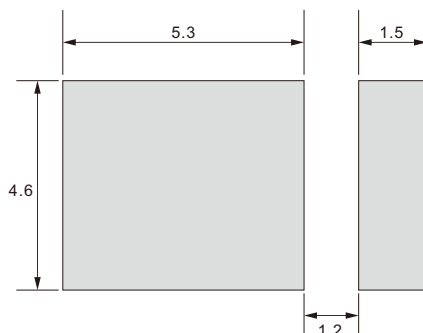


**Fig.6 Holding current vs Junction Temperature**



**Package Outline**
**PDFN7656**
**Unit : mm**


UNIT		A	B	B1	C	D	d	d1	E	HE
mm	max	1.70	5.20	1.40	0.40	7.00	4.20	2.10	5.80	7.80
	min	1.30	4.80	1.00	0.20	6.60	3.80	1.90	5.40	7.40

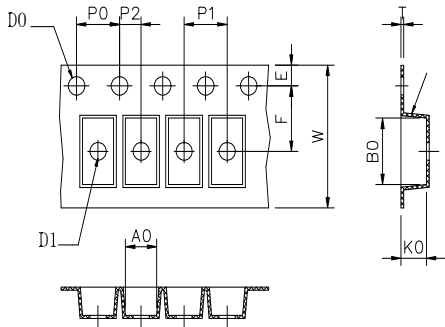
**Suggested Pad Layout**
**PDFN7656**
**Unit : mm**


Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$
3. The pad layout is for reference purpose only.

## Carrier Tape Dimensions

Unit : mm

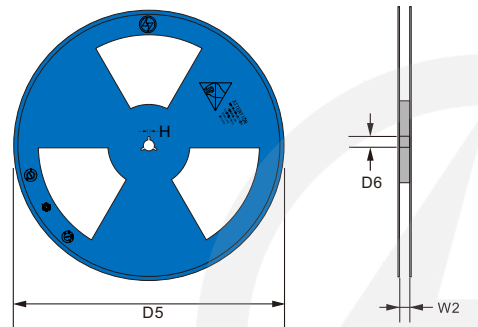


Symbol	Spec	Symbol	Spec
W	12.00±0.10	P1	8.00±0.10
E	1.75±0.10	P2	2.00±0.05
F	5.50±0.05	T	0.25±0.02
D0	1.55±0.05	A0	5.90±0.10
D1	1.55±0.10	B0	8.00±0.10
P0	4.00±0.10	K0	1.75±0.05

## Reel Dimensions

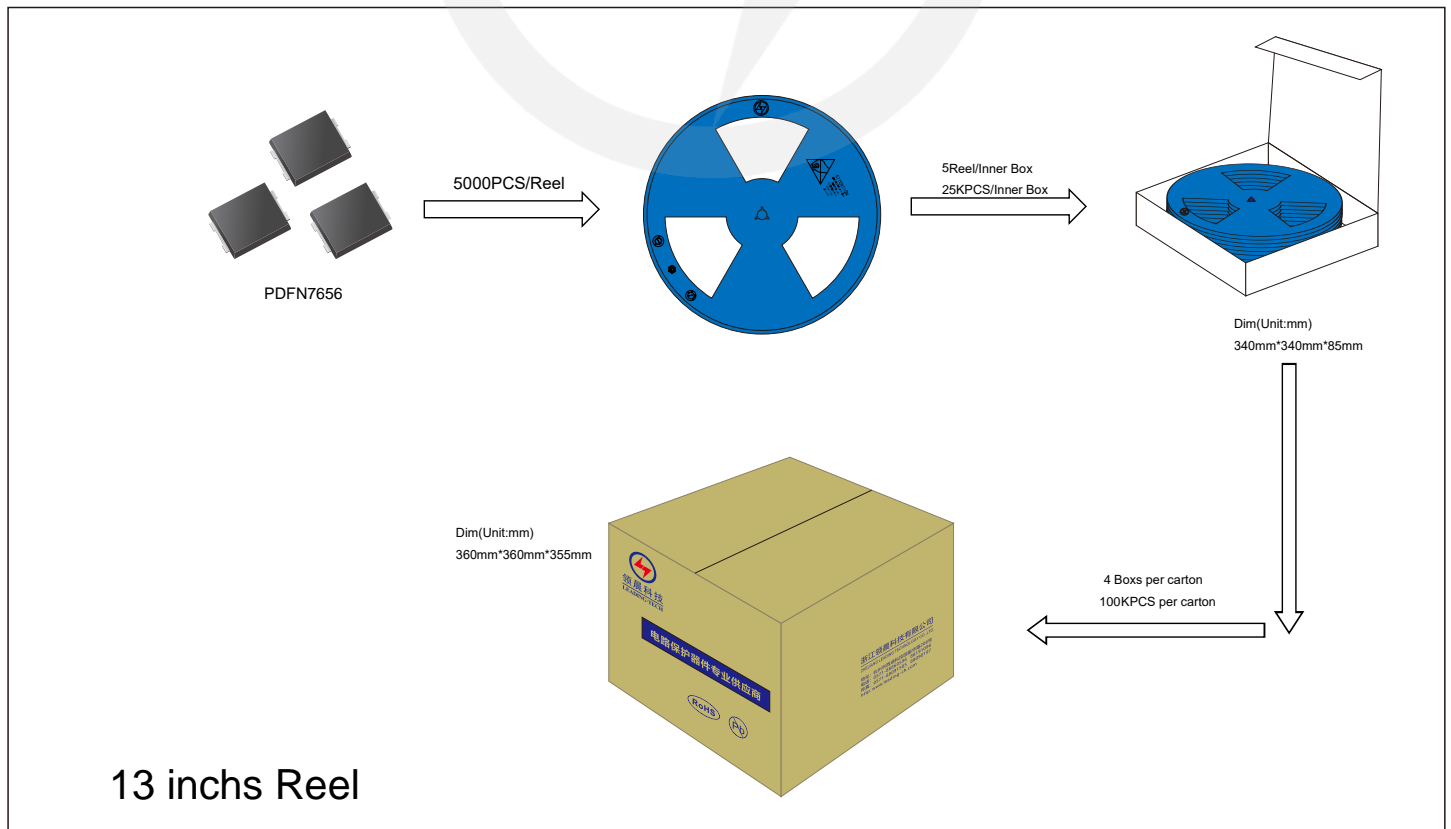
Unit : mm

13" Reel



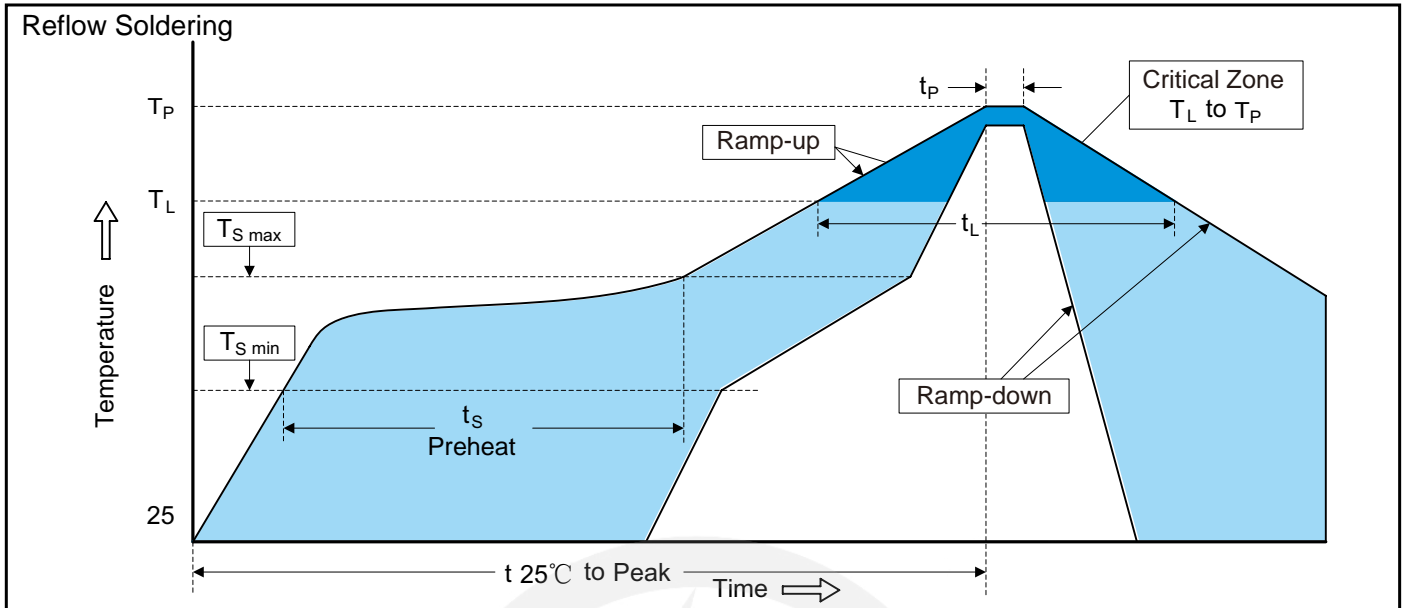
D5	Φ330.0±2.0
D6	Φ13.5±0.5
H	2.5±1.0
W2	12±1.0
Quantity: 5000PCS	

## Packaging





Recommended Soldering Conditions



Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T <sub>L</sub> to T <sub>P</sub> )	3°C/second max.
Preheat	
-Temperature Min (T <sub>S min</sub> )	150°C
-Temperature Max (T <sub>S max</sub> )	200°C
-Time (min to max) (t <sub>s</sub> )	60-180 seconds
T <sub>S max</sub> to T <sub>L</sub>	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature (T <sub>L</sub> )	217°C
-Time (t <sub>L</sub> )	60-150 seconds
Peak Temperature (T <sub>P</sub> )	260°C
Time within 5°C of actual Peak Temperature (t <sub>p</sub> )	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

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## Version Update Information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision Content	Revision Reason	Revision Person	Note
01	2025.04.16	2025.04.16	1.0	New file	/	Ding	
02	2026.02.10	2026.02.10	1.1	Modify Package Outline	/	Ding	