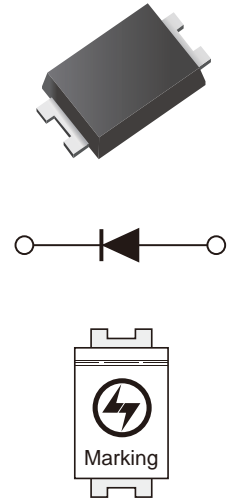


Surface Mount Schottky Barrier Rectifier

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Data

- Case: PDFN3620
- Terminal: Leads solderable per MIL-STD-750 Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any

Ordering Information

Part Number	Shipping	Reel
LT32P3 THRU LT320P3	12000PCS Tape&Reel	13 inches

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbol	LT32P3	LT34P3	LT36P3	LT38P3	LT310P3	LT315P3	LT320P3	Unit
	Marking	P32	P34	P36	P38	P310	P315	P320	
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	150	200	V
Maximum instantaneous forward voltage at 3A	V_F	0.5	0.5	0.7	0.85	0.85	0.95	0.95	V
Maximum average forward rectified current at T_L (see fig.1)	$I_{(AV)}$	3							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80							A
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	0.5				0.2		2	mA
		20			10				
Typical Junction Capacitance (Note1)	C_J	500			300				pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	55							$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-55 to +150							$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150							$^\circ\text{C}$

Note:(1) Measured at 1MHz and applied reverse voltage of 4.0V D.C.

(2) P.C.B. mounted with 2.0" x 2.0"(5.0cm x 5.0cm) copper pad areas.



Characteristics Curve

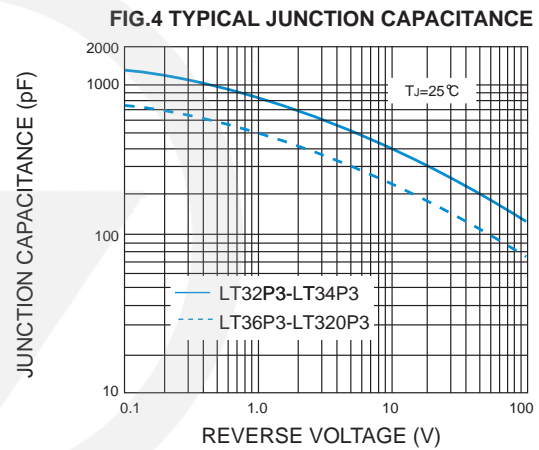
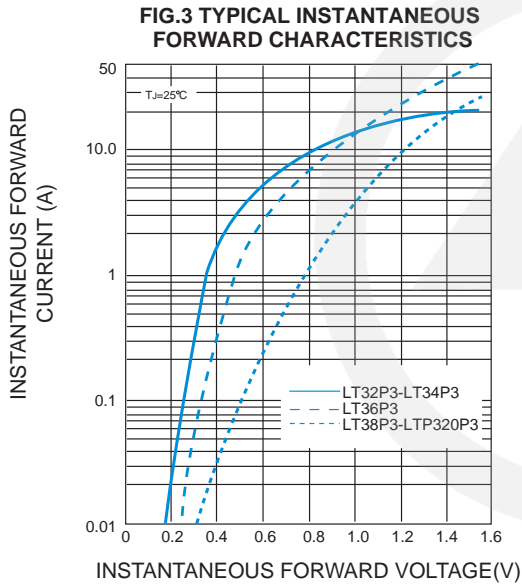
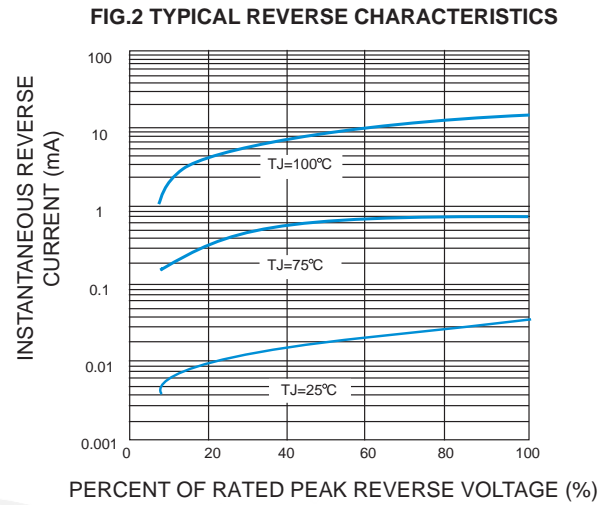
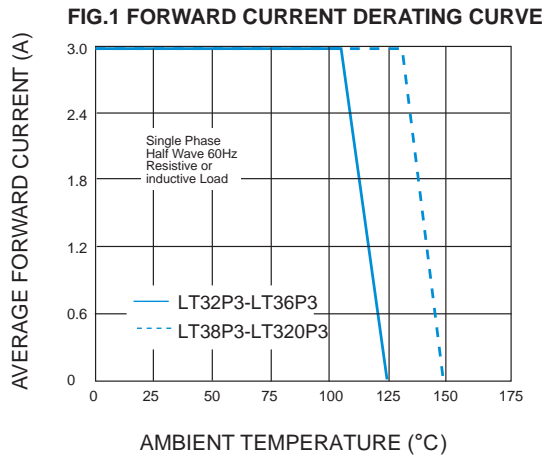


FIG.5 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

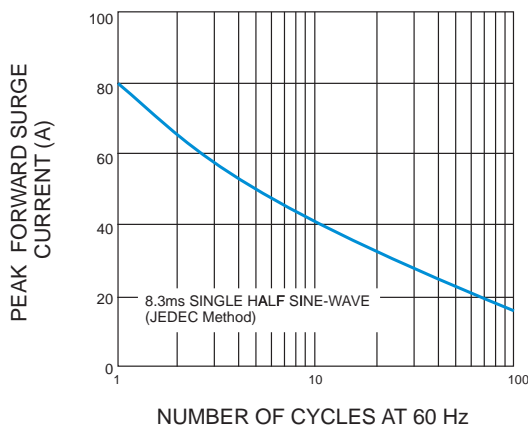
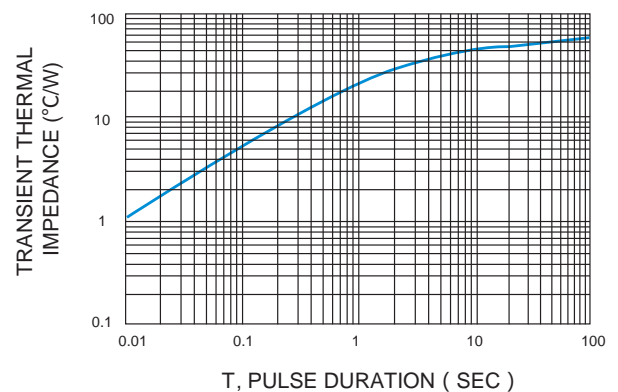


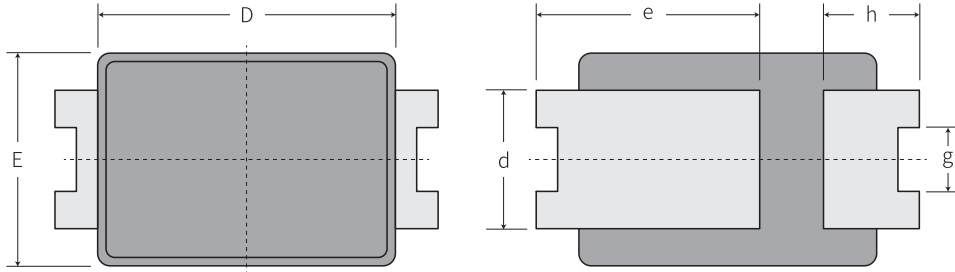
FIG.6 TYPICAL TRANSIENT THERMAL IMPEDANCE



Package Outline

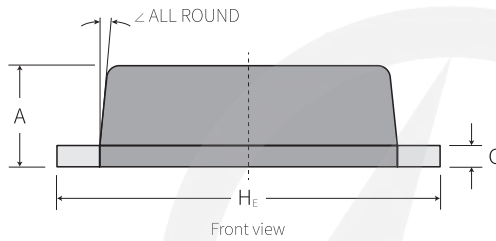
PDFN3620

Unit : mm



Top View

Bottom View



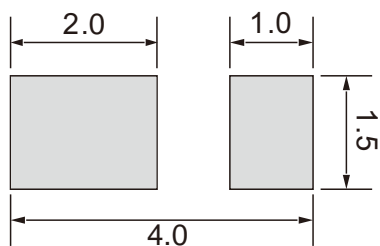
Front view

UNIT		A	C	D	E	H _E	d	e	g	h	∠
mm	max	1.15	0.30	3.00	2.20	3.80	1.50	2.30	0.80	1.10	6°
	min	0.75	0.10	2.60	1.80	3.40	1.10	1.70	0.40	0.70	

Suggested Pad Layout

PDFN3620

Unit : mm

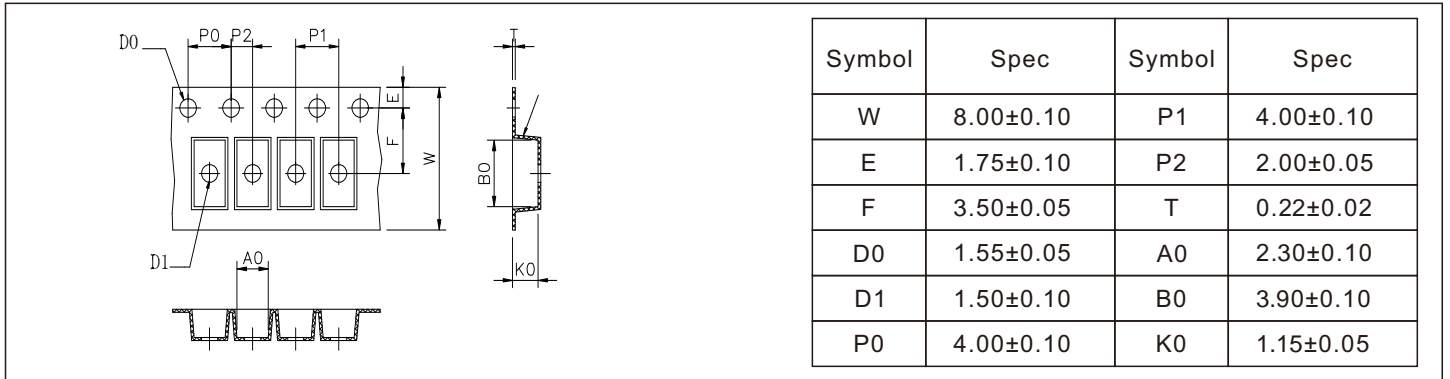


Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm
3. The pad layout is for reference purpose only.

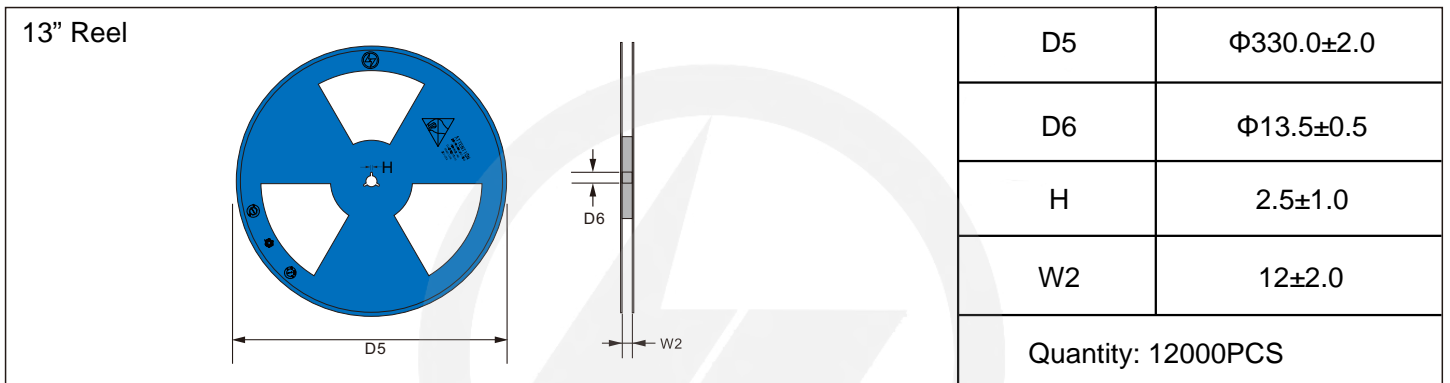
Carrier Tape Dimensions

Unit : mm

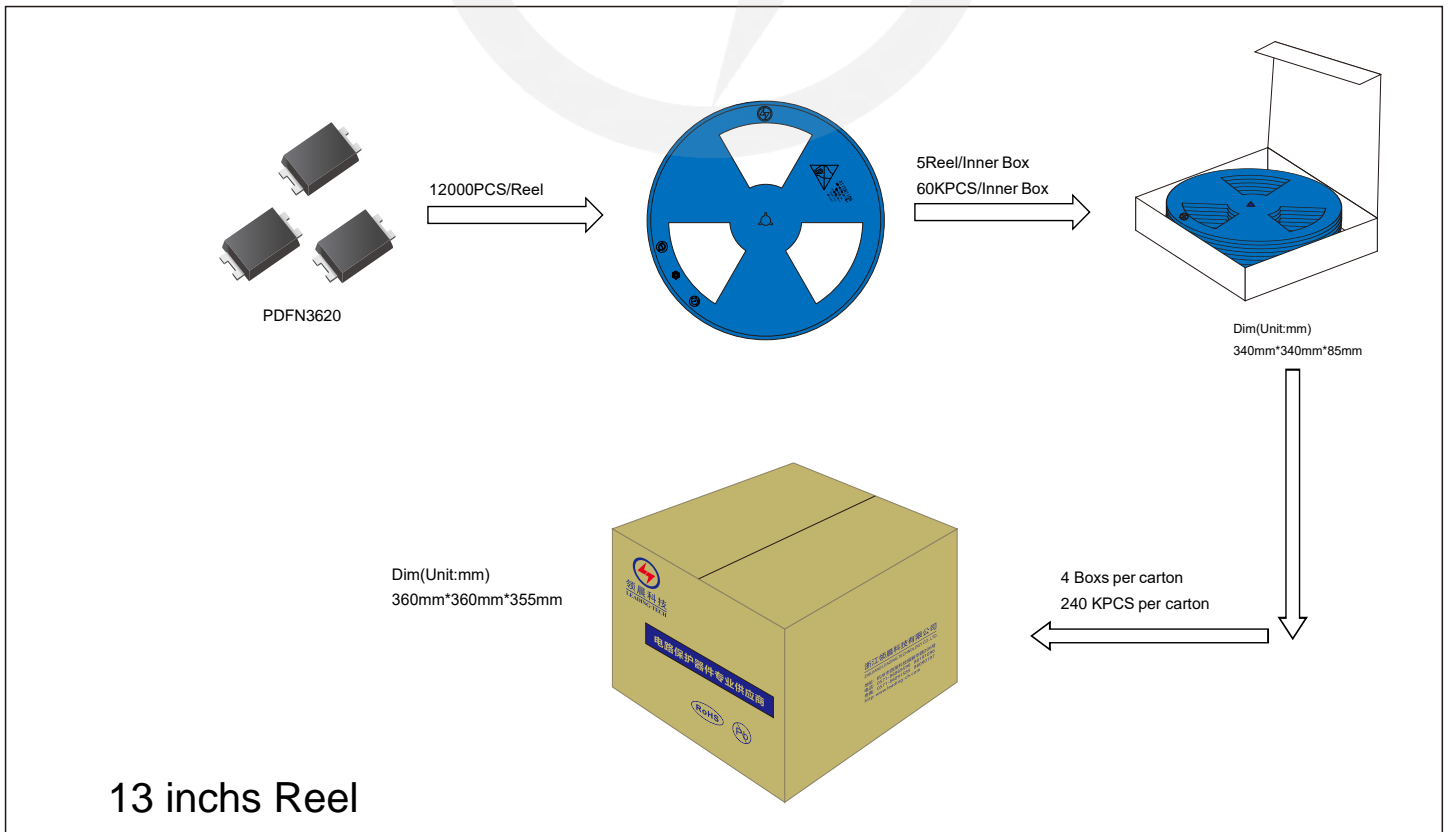


Reel Dimensions

Unit : mm

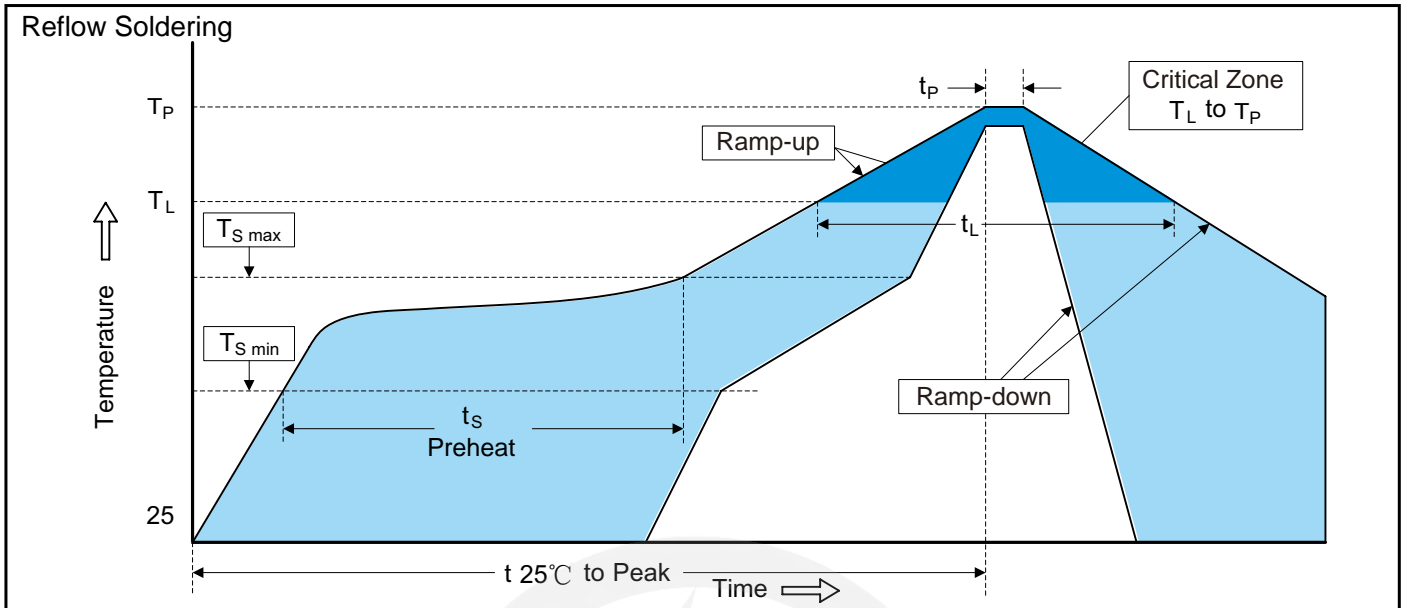


Packaging





Recommended Soldering Conditions



Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T _L to T _P)	3°C/second max.
Preheat	
-Temperature Min (T _{S min})	150°C
-Temperature Max (T _{S max})	200°C
-Time (min to max) (t _s)	60-180 seconds
T _{S max} to T _L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature (T _L)	217°C
-Time (t _L)	60-150 seconds
Peak Temperature (T _P)	260°C
Time within 5°C of actual Peak Temperature (t _p)	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	2024.03.01	2024.03.01	1.0	New File	/	Ding	
02	2025.04.18	2025.04.18	1.1	1.Revise Marking 2.Package Outline e(min)=1.7	/	Ding	
03	2025.06.30	2025.06.30	1.2	Update packagin information	/	Ding	