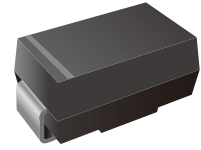


Surface Mount Superfast Recovery Rectifier

Features

- Super fast switching for high efficiency
- Glass passivated chip junction
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Data

- Case: SMA
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Approx. Weight: 60mg

Ordering Information

Part Number	Shipping	Reel
LTE2A THRU LTE2J-TR5	5000PCS Tape&Reel	13 inches
LTE2A THRU LTE2J-TR7K5	7500PCS 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	Symbols	LTE2A	LTE2B	LTE2C	LTE2D	LTE2E	LTE2G	LTE2J	Unit	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	V	
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V	
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	600	V	
Maximum average forward rectified current at $T_L=55^\circ\text{C}$	$I_{(AV)}$	2							A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A	
Maximum instantaneous forward voltage at 2.0A	V_F	0.95			1.25		1.7		V	
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R	5				100				μA
Maximum reverse recovery time (Note1)	t_{rr}	35								ns
Typical junction capacitance (Note2)	C_J	40								pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	60								$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$	

Note:1.Reverse recovery condition $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$
 2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 3.P.C.B. mounted with 1"x1"(2.54cmx2.54cm) copper pad areas



Characteristics Curves

FIG. 1 FORWARD CURRENT DERATING CURVE

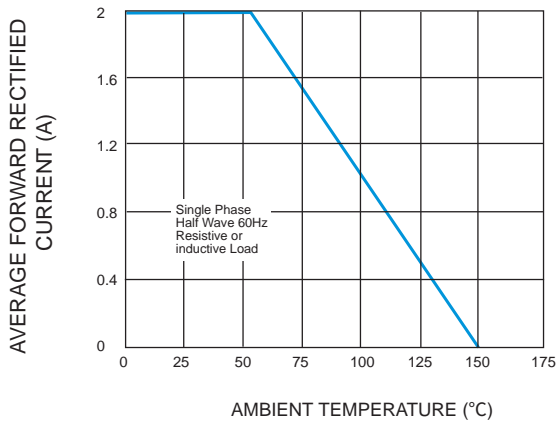


FIG. 2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

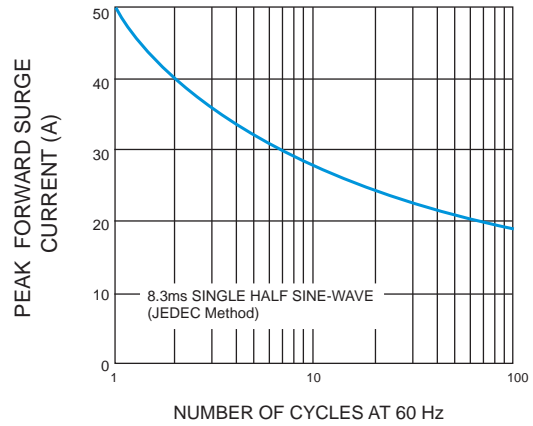


Fig.3 TYPICAL FORWARD CHARACTERISTICS

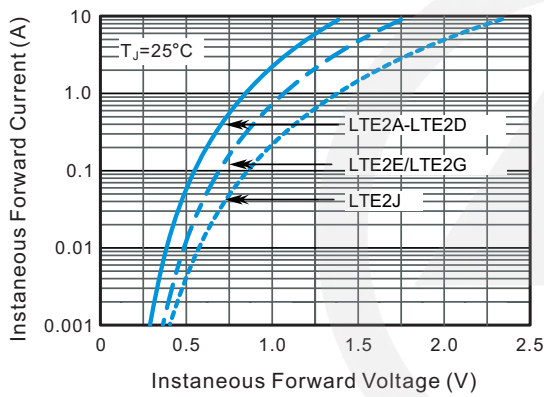


Fig.4 TYPICAL REVERSE CHARACTERISTICS

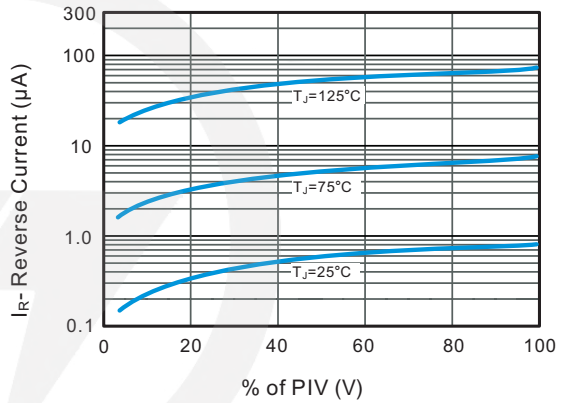
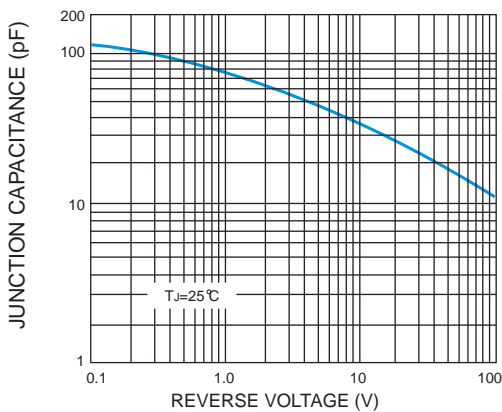
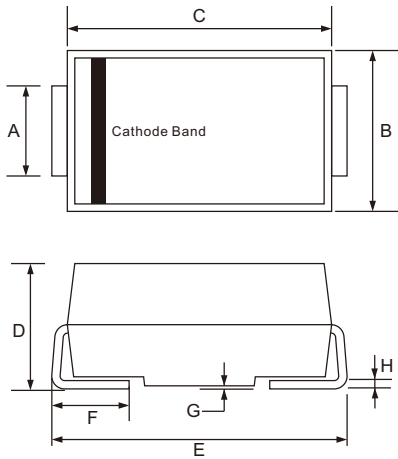


FIG. 5 TYPICAL JUNCTION CAPACITANCE



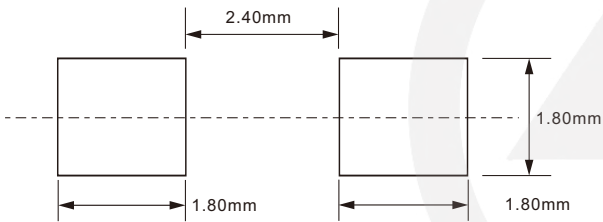
SMA Package Outline



Unit: mm

SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.25	1.65
B	2.30	2.79
C	4.00	4.75
D	1.90	2.50
E	4.70	5.28
F	0.76	1.52
G	0.20 TYP.	
H	0.15	0.31

SMA Suggested Pad Layout



Note:

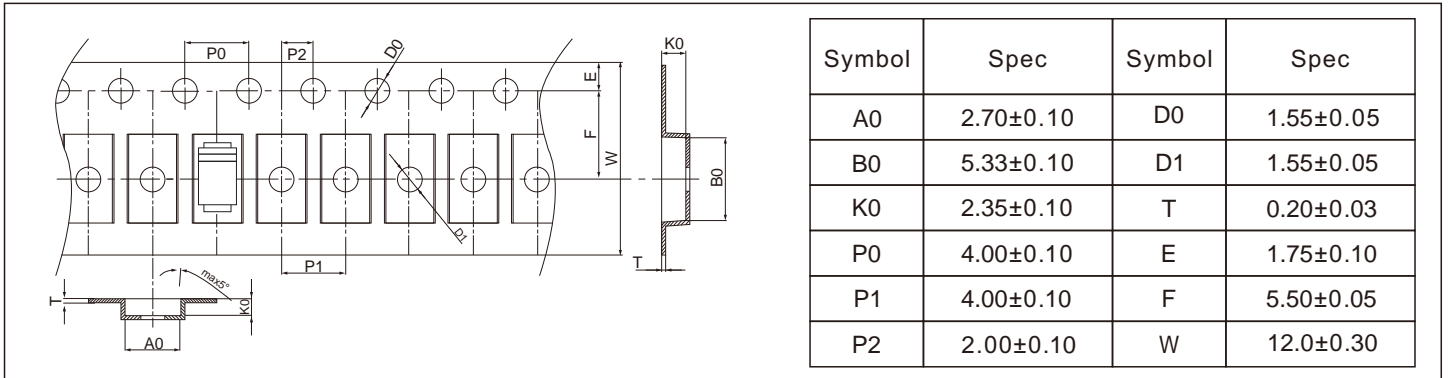
1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purpose only.

Marking

Type number	Marking code
LTE2A	ES2A
LTE2B	ES2B
LTE2C	ES2C
LTE2D	ES2D
LTE2E	ES2E
LTE2G	ES2G
LTE2J	ES2J

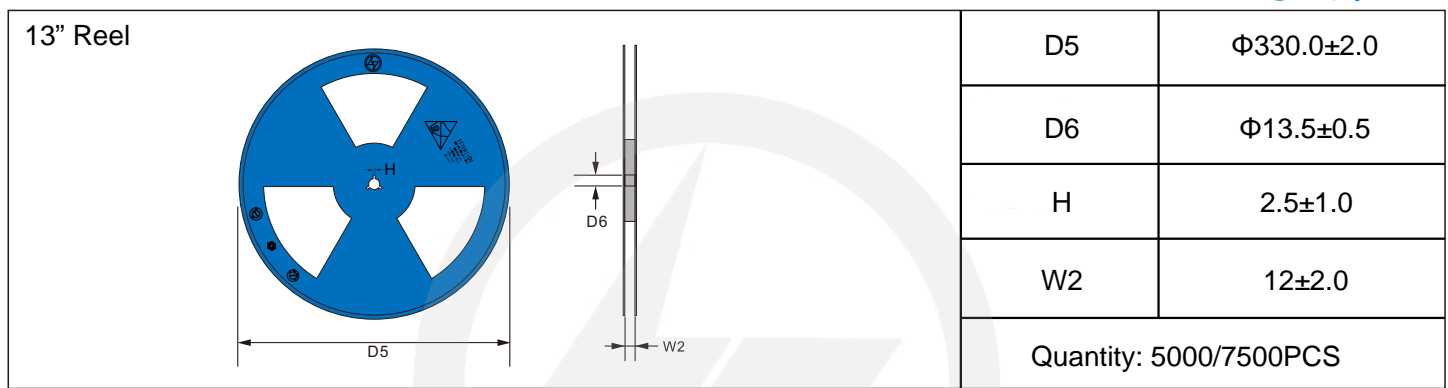
Carrier Tape Dimensions

Unit : mm

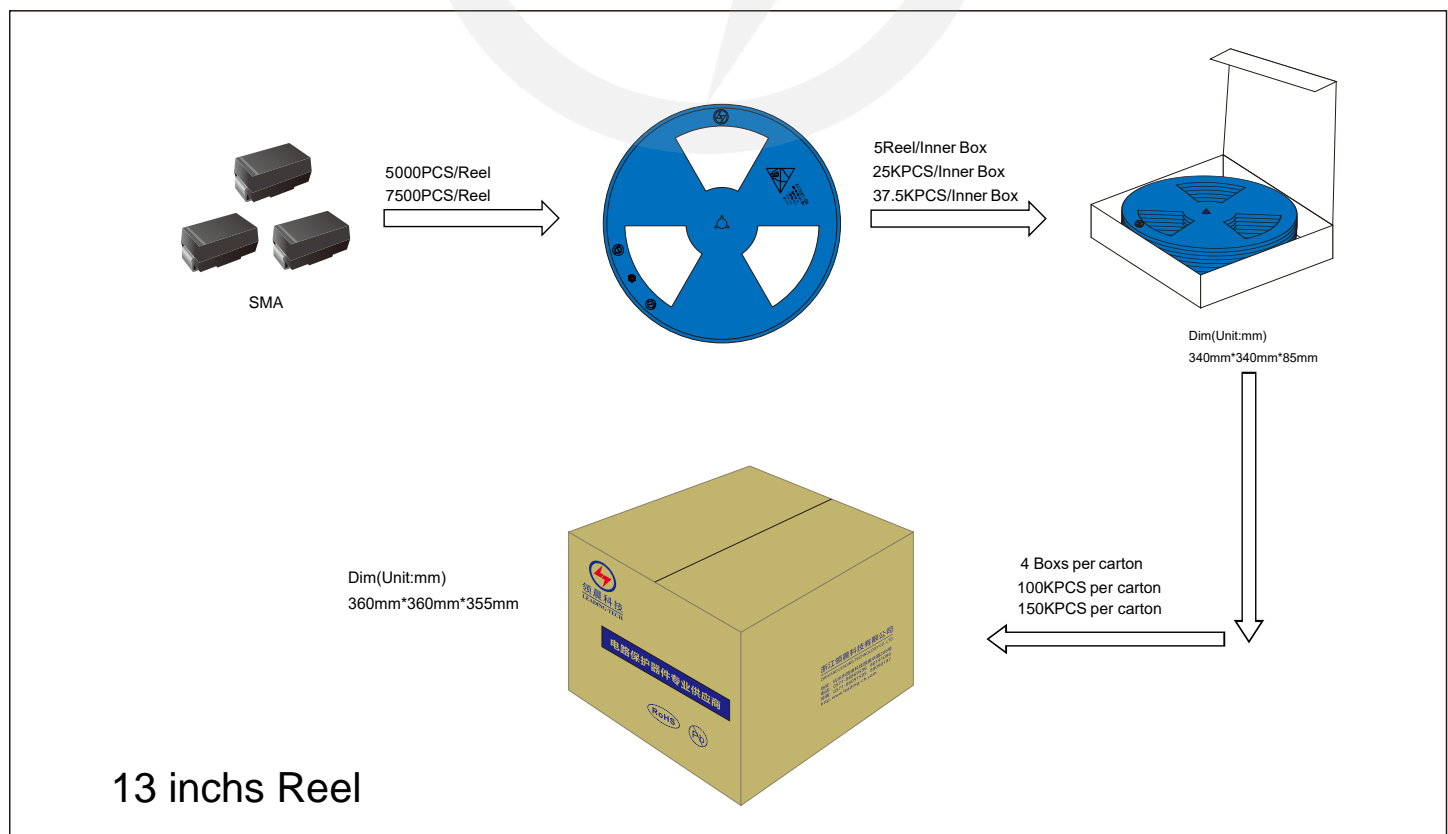


Reel Dimensions

Unit : mm

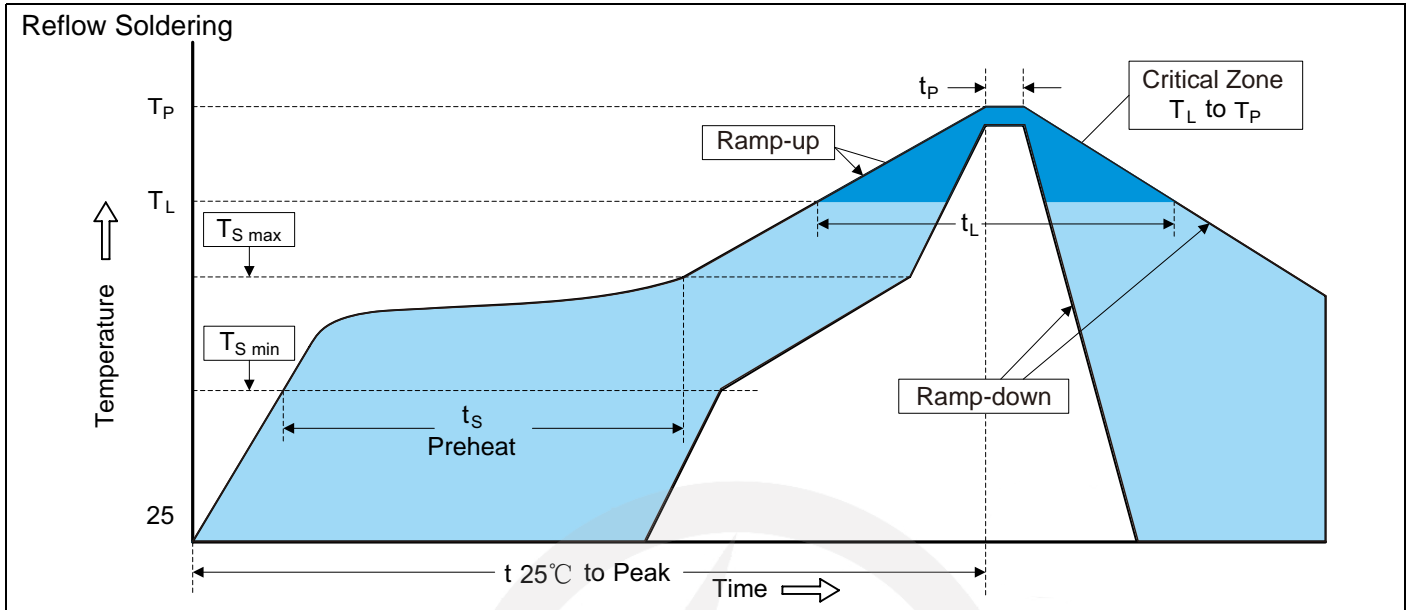


Packaging





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 ($T_{S\ min}$) -Temperature Max ($T_{S\ max}$) -Time (min to max) (t_s)	150°C 200°C 60-180 seconds
$T_{S\ max}$ to T_L -Ramp-up Rate	3°C/second max.
Time maintained above: -Temperature (T_L) -Time (t_L)	217°C 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	2024.5.31	2024.5.31	3.0	New File	/	Ding	
02	2025.06.16	2025.06.16	3.1	Update packaging information	/	Ding	
03	2025.10.27	2025.10.27	3.2	Add Weight	/	Ding	