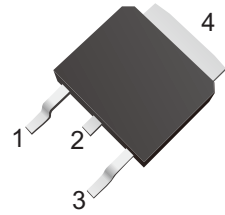
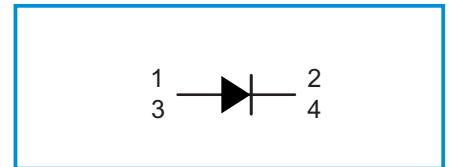


Superfast Glass Passivated Rectifier



TO-252

Functional Diagram


Features

- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed
- Mounting position: any

Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

CHARACTERISTICS	Symbols	LTE1001DP	LTE1002DP	LTE1003DP	LTE1004DP	LTE1005DP	LTE1006DP	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	300	400	500	600	V
Maximum RMS voltage	V_{RMS}	70	140	210	280	350	420	V
Maximum DC Blocking Voltage	V_{DC}	700	200	300	400	500	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10						A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	170						A
Max Instantaneous Forward Voltage at 10 ADC	V_F	1.0		1.30		1.70		V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 125^\circ\text{C}$	I_R	1 300						uA
Typical Junction Capacitance $f=1\text{MHz}, 4\text{V DC}$	C_j	45						pF
Typical Thermal Resistance ⁽¹⁾	$R_{\theta JA}$	15						°C/W
Maximum Reverse Recovery Time ⁽²⁾	t_{rr}	35						ns
Operating Junction Temperature Range	T_j	-55 ~ +150						°C
Storage Temperature Range	T_{stg}	-55 ~ +150						°C

(1) P.C.B. mounted with 10cm x 10cm x 1mm copper pad areas.

 (2) Measured with $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.

Ratings and characteristics Curves

Fig.1 Maximum Average Forward Current Rating

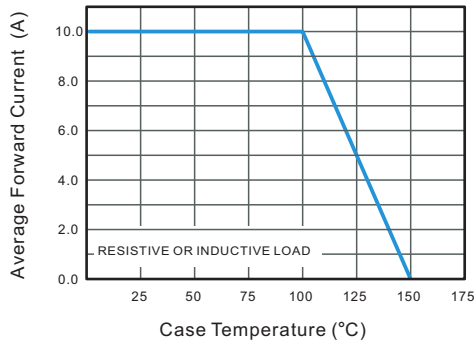


Fig.2 Typical Reverse Characteristics

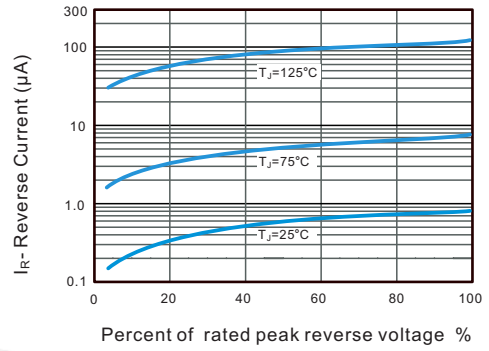


Fig.4 Typical Forward Characteristics

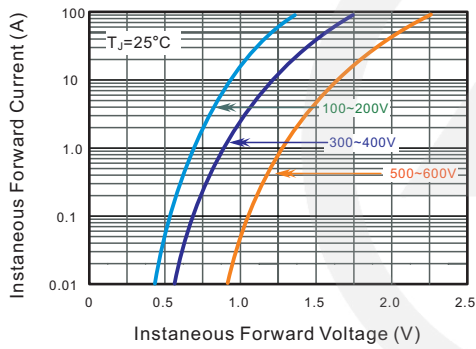


Fig.4 Typical Junction Capacitance

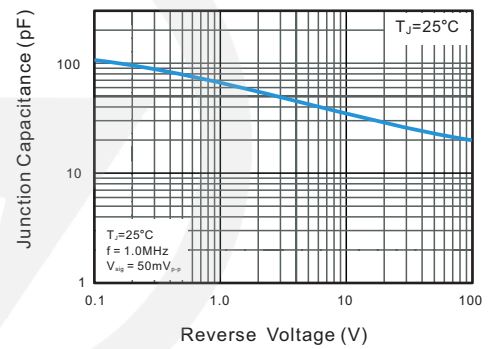
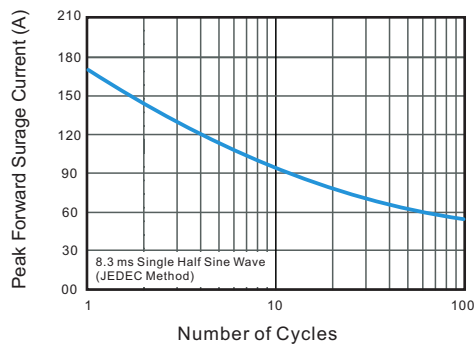
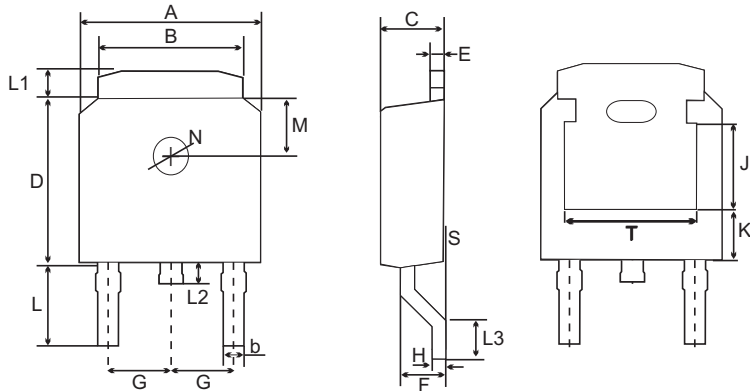


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



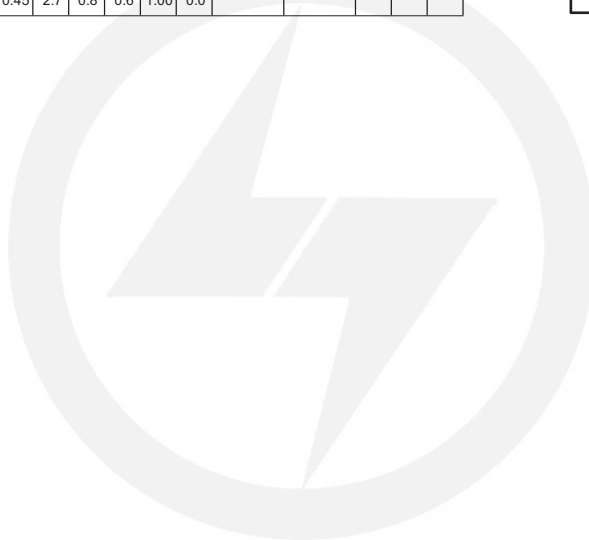
TO-252 Package Outline



UNIT	A	B	b	C	D	E	F	G	H	L	L1	L2	L3	S	M	N	J	K	T	
mm	max	6.7	5.5	0.8	2.5	6.3	0.6	1.8		0.55	3.1	1.2	1.0	1.75	0.23					
	typ	6.6	5.3	0.7	2.3	6.1	0.5	1.5	2.29 TYPICAL	0.50	2.8	1.0	0.8	1.30	0.15	1.8 TYPICAL	1.3 TYPICAL	3.16 ref.	1.80 ref.	4.83 ref.
	min	6.3	5.1	0.3	2.1	5.9	0.4	1.3		0.45	2.7	0.8	0.6	1.00	0.0					

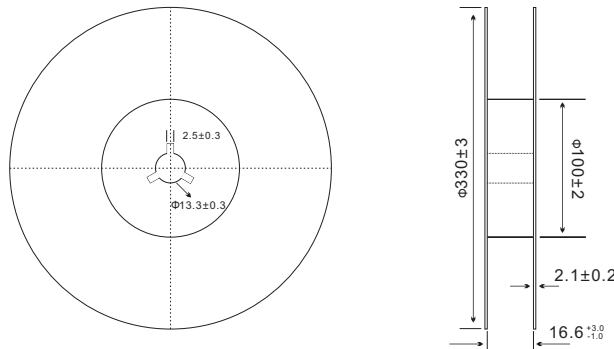
Marking

Type number	Marking code
LTE1001DP	LTE1001DP
LTE1002DP	LTE1002DP
LTE1003DP	LTE1003DP
LTE1004DP	LTE1004DP
LTE1005DP	LTE1005DP
LTE1006DP	LTE1006DP



Packaging

13" Reel



Quantity: 2500PCS