

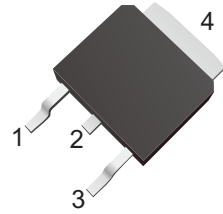
Super Fast Glass Passivated Rectifiers

Reverse Voltage – 100 to 600 V

Forward Current – 8.0 A

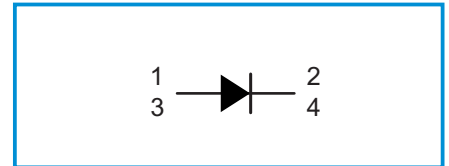
Features

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



TO-252

Functional Diagram



Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

CHARACTERISTICS	Symbols	LTE801DP	LTE802DP	LTE803DP	LTE804DP	LTE805DP	LTE806DP	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}	100	200	300	400	500	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	8.0						A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	160						A
Max Instantaneous Forward Voltage at 8 A DC	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						μA
Typical Junction Capacitance $f=1\text{MHz}, 4\text{V DC}$	C_j	100						pF
Typical Thermal Resistance ⁽¹⁾	$R_{\theta JA}$	50						$^\circ\text{C/W}$
Maximum Reverse Recovery Time ⁽²⁾	t_{rr}	35						ns
Operating Junction Temperature Range	T_j	-55 ~ +150						$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ +150						$^\circ\text{C}$

(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

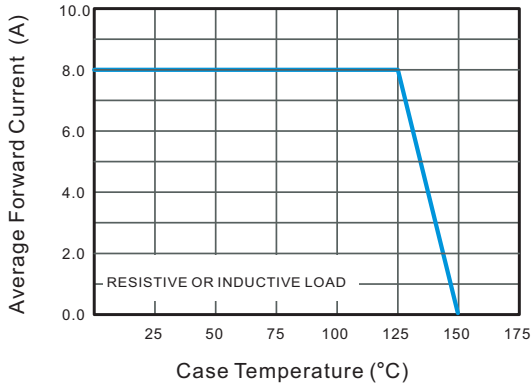


Fig.2 Typical Reverse Characteristics

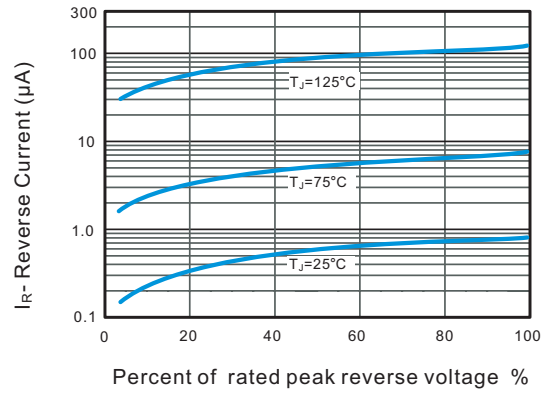


Fig.4 Typical Forward Characteristics

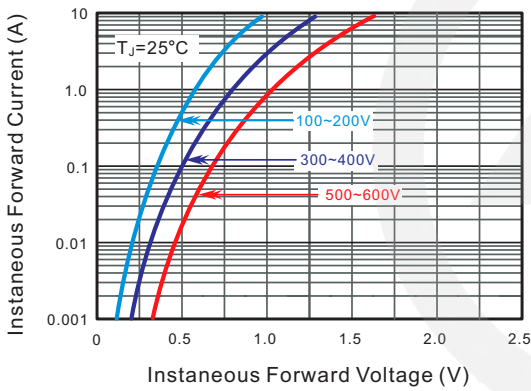


Fig.4 Typical Junction Capacitance

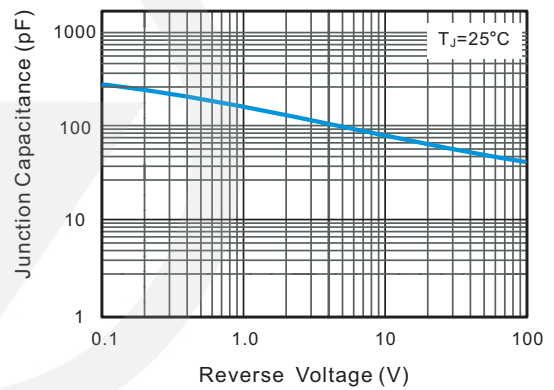


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

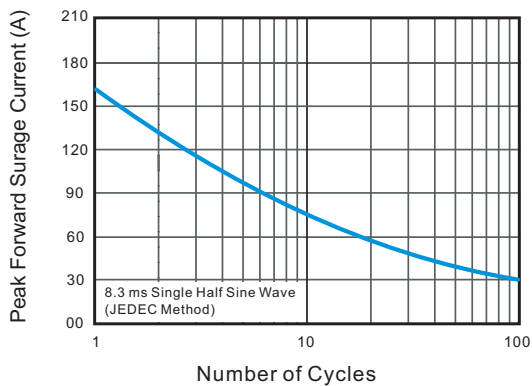
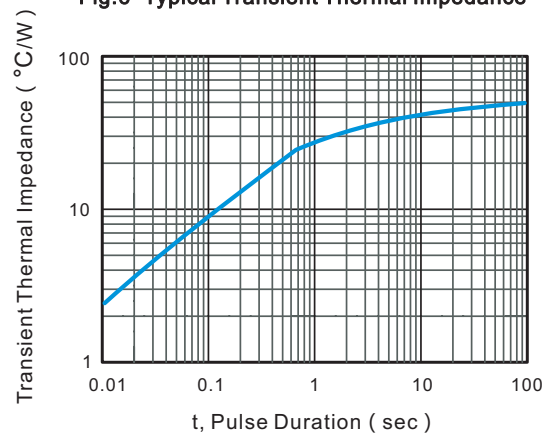
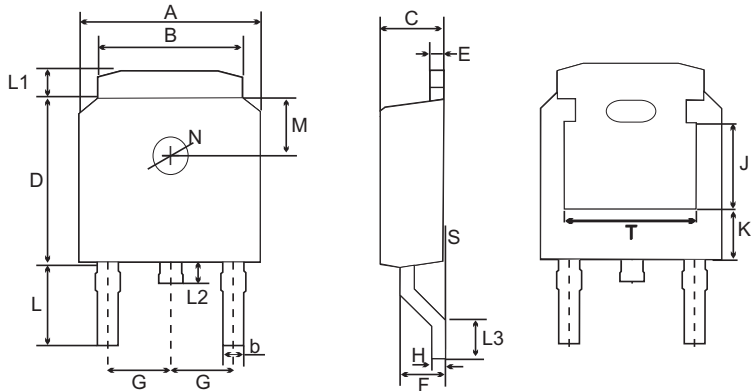


Fig.6- Typical Transient Thermal Impedance



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					

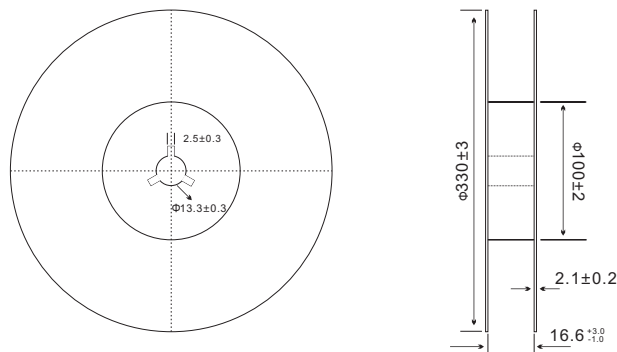
Marking

Type number	Marking code
LTE801DP	SF801DY
LTE802DP	SF802DY
LTE803DP	SF803DY
LTE804DP	SF804DY
LTE805DP	SF805DY
LTE806DP	SF806DY



Packaging

13" Reel



Quantity: 2500PCS