

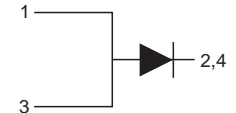
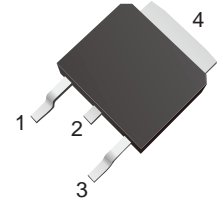
Low VF Schottky Barrier Rectifiers

Features

- Low power loss,high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering guaranteed
- Lead free in comply with EU RoHS 2011/65/EU directives

Mechanical data

- Case: TO-252
- Case Material: “Green” molding compound, UL flammability classification 94V-0,“Halogen-free”



Ordering Information

Part Number	Marking	Shipping	Reel
LTM15L45DP-TR2K5	15L45DP	2500PCS Tape&Reel	13 inchs

Maximum Ratings and Electrical Characteristics

Ratings at 25°C Ambient Temperature Unless Otherwise Specified

Parameter	Symbols	LTM15L45DP	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	45	V
Maximum RMS voltage	V_{RMS}	32	V
Maximum DC Blocking Voltage	V_{DC}	45	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	15	A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150	A
Operating Junction Temperature Range	T_j	-55 ~ +150	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C
Typical Thermal Resistance	$R_{\theta JC}$	5	°C/W
	$R_{\theta JA}$	50	

Parameter	Symbols	Test Conditions	Min	TYP	Max	Units
Breakdown voltage	V_{BR}	$I_R=0.5mA$	45			V
Instantaneous forward voltage	V_F	$I_F=15A, T_J=25^\circ C$		0.55	0.6	V
Reverse current	I_R	$V_R=32, T_J=25^\circ C$		5	–	uA
		$V_R=45V, T_J=25^\circ C$		–	50	uA
		$V_R=45V, T_J=100^\circ C$		10	–	mA



Characteristic Curves

Fig.1 Typical Forward Current Derating Curve

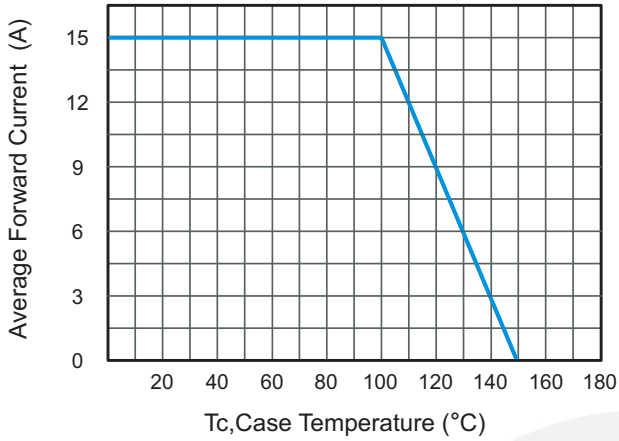


Fig.2 Typical Reverse Characteristics

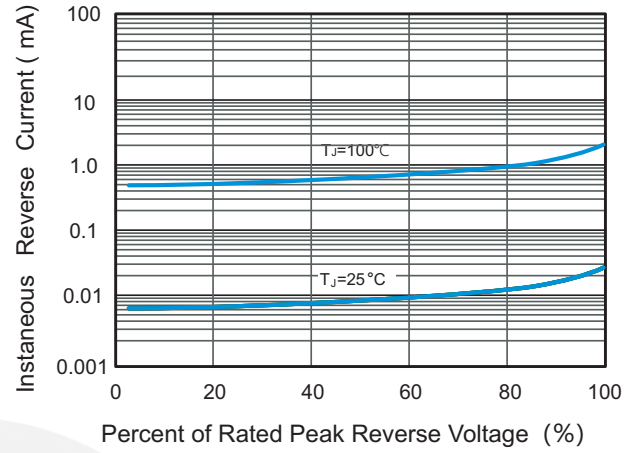


Fig.3 Typical Forward Characteristic

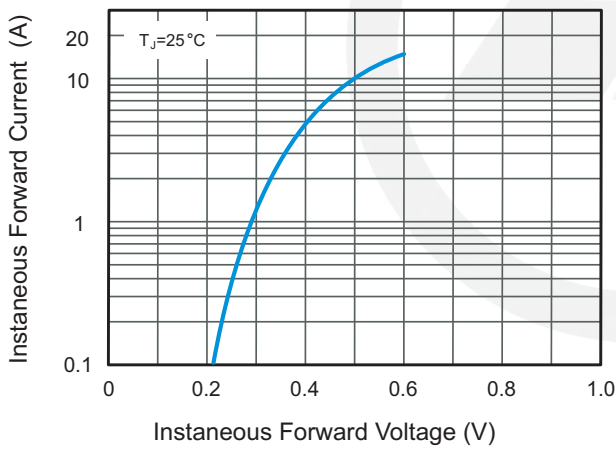
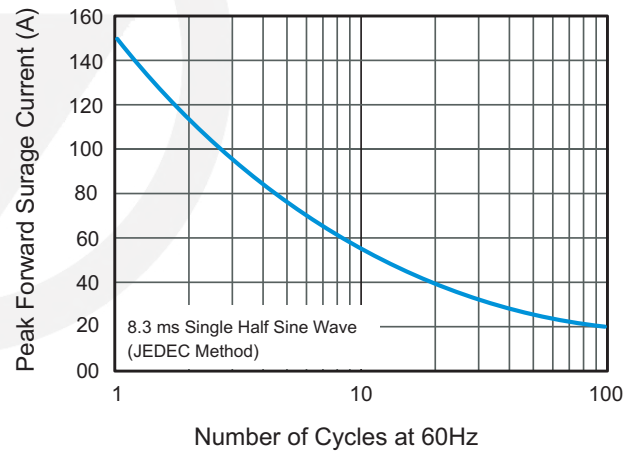
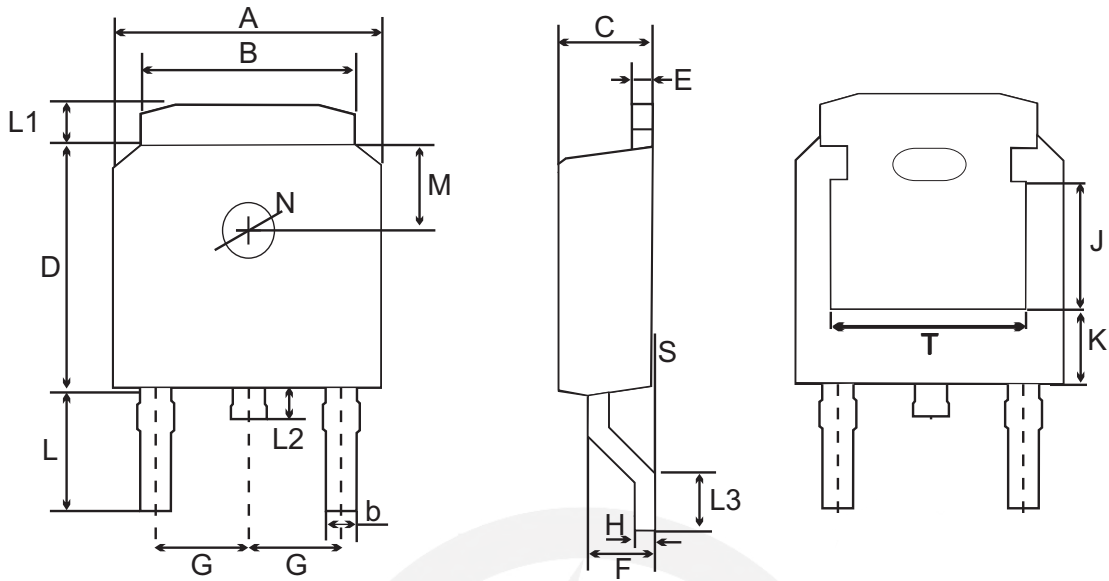


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current





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	2.29 TYPICAL	0.55	3.1	1.2	1.0	1.75	0.23	1.8 TYPICAL	1.3 TYPICAL	3.16 ref.	1.80 ref.	4.83 ref.
	typ	6.6	5.3	0.7	2.3	6.1	0.5	1.5		0.50	2.8	1.0	0.8	1.30	0.15					
	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					



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	2024.9.17	2024.9.17	3.0	New File	/	Ding	
02	2025.06.11	2025.06.11	3.1	Update packaging information	/	Ding	