

/ Descriptions

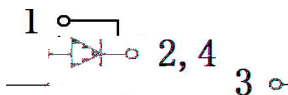
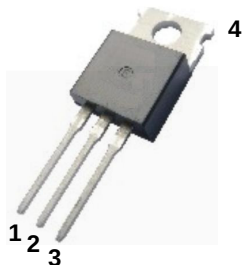
Schottky Barrier Diode in a TO-220 Plastic Package.

/ Features

Low forward voltage drop, Low power loss, high efficiency.

/ Applications

For use in high frequency inverters, switching power supplies, freewheeling diodes, dc-to-dc converters and reverse battery protection.

/ Equivalent Circuit**/ Pinning**

PIN1: Anode PIN 2、4: Cathode PIN 3: Anode

/ h_{FE} Classifications & Marking

See Marking Instructions.

/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	V
Maximum RMS Voltage	V_{RMS}	31.5	V
Maximum Average forward current	$I_{F(AV)}$	30	A
Non-Repetitive Peak Surge Current	I_{FSM}	300	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	2	$^{\circ}\text{C}/\text{W}$
Junction Temperature Range	T_j	150	
Storage Temperature Range	T_{stg}	-65~150	

/ Electrical Characteristics($T_a=25^\circ\text{C}$)

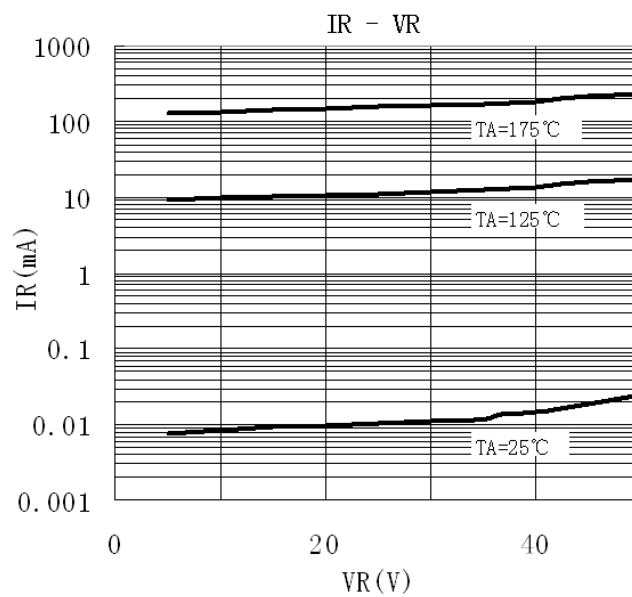
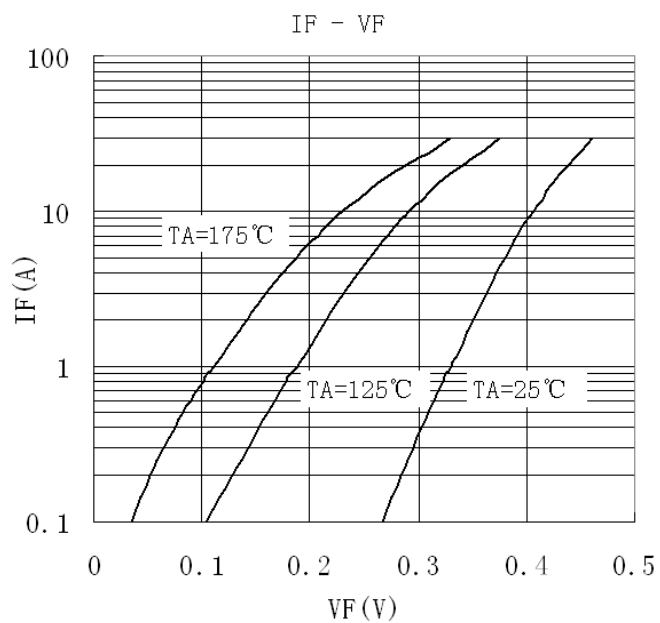
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown voltage	V_{BR}	$I_R=500\text{ }\mu\text{A}$	50			V
Forward Voltage	V_F (Note 1)	$I_F=15\text{A}(T_A=25^\circ\text{C})$		0.46	0.50	V
		$I_F=30\text{A}(T_A=25^\circ\text{C})$		0.51	0.54	V
		$I_F=15\text{A}(T_A=125^\circ\text{C})$			0.40	V
		$I_F=30\text{A}(T_A=125^\circ\text{C})$			0.50	V
Instantaneous Reverse Current	I_R (Note 2)	$V_R=45\text{V}(T_A=25^\circ\text{C})$			100	μA
		$V_R=45\text{V}(T_A=125^\circ\text{C})$			20	mA

(1) Pulse test: 300 μs pulse width, 1 % duty cycle(2) Pulse test: Pulse width $\leq 40\text{ ms}$

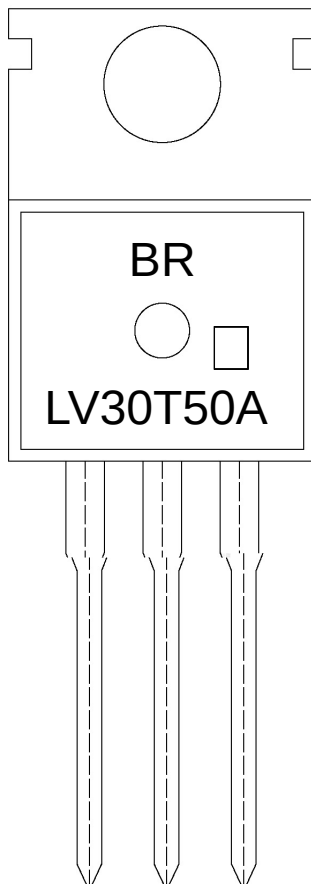
(3)

Unless otherwise noted, values for the parameters of a single chip

/ Electrical Characteristic Curve



/ Marking Instructions



Note:

BR:

Company Code

LV30T50A

Product Type.

****:

Lot No. Code, code change with Lot No.

