

Description

The LV10150FCT is schottky diode, TO-220F plastic package.

Features

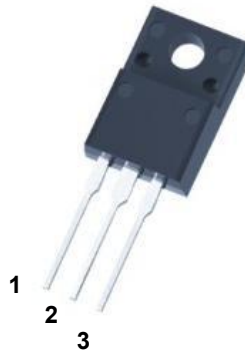
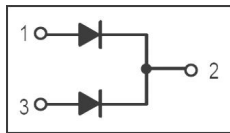
- Low forward voltage drop
- Low power losses
- High efficiency operation

Applications

- High frequency inverters
- Switching power supplies
- Freewheeling diodes
- OR-ing diode
- Dc-to-dc converters and reverse battery protection

V_{RM}	$I_{F(AV)}$ (total)	I_{FSM}
150V	2×5A	80A

Equivalent Circuit & Pinning



PIN1: Anode PIN 2: Cathode PIN 3: Anode

Marking

See Marking Instructions.

Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Recurrent Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RM} V_{RSM} V_{DC}	150	V
RMS Voltage	V_{RMS}	105	V
Average Rectified Forward Current	$I_{F(AV)}$	2×5	A
Non Repetitive Peak Surge Current	I_{FSM}	80	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	4	°C/W
Junction and Storage Temperature Range	T_j T_{stg}	-55~+150	°C

Electrical Characteristics(Ta=25°C)

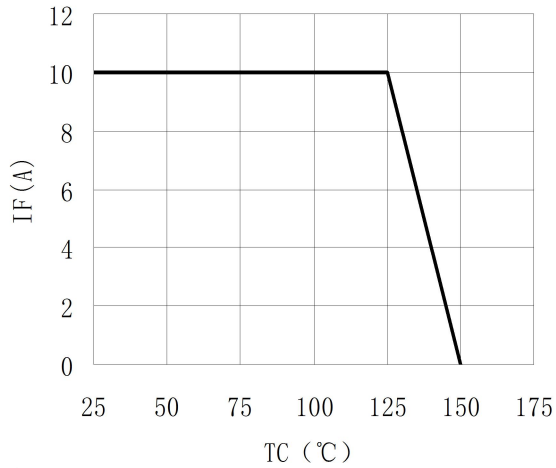
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	V_{BR}	$I_R=1mA(Ta=25^\circ C)$	150			V
Forward Voltage	V_F	$I_F=3A(Ta=25^\circ C)$		0.76	0.83	V
		$I_F=5A(Ta=25^\circ C)$		0.86	0.95	V
		$I_F=3A(Ta=125^\circ C)$		0.61		V
		$I_F=5A(Ta=125^\circ C)$		0.67	0.75	V
Instantaneous Reverse Current	$I_{R(Notes\ 1)}$	$V_R=150V(Ta=25^\circ C)$			15	μA
		$V_R=150V(Ta=125^\circ C)$		1.0	5.0	mA

Notes :

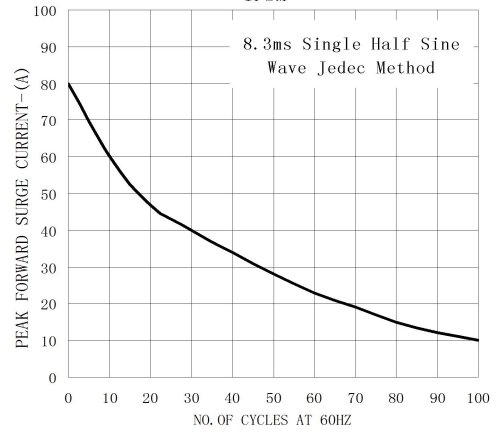
- Short duration pulse test used to minimize self-heating effect.
- Unless otherwise noted, values for the parameters of a single chip

Electrical Characteristic Curve

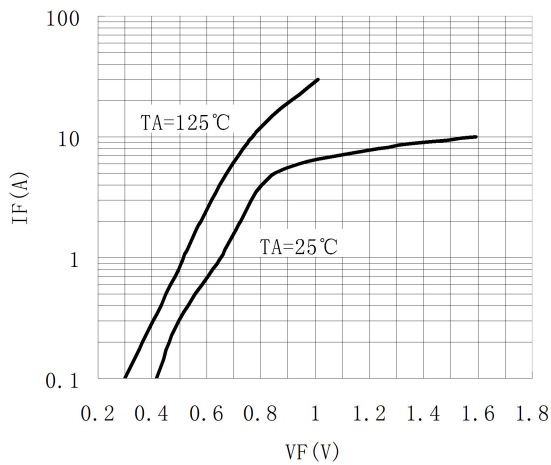
IF - TC



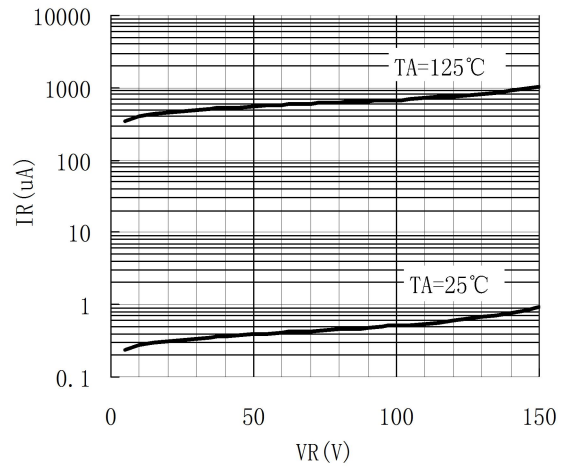
IFSM



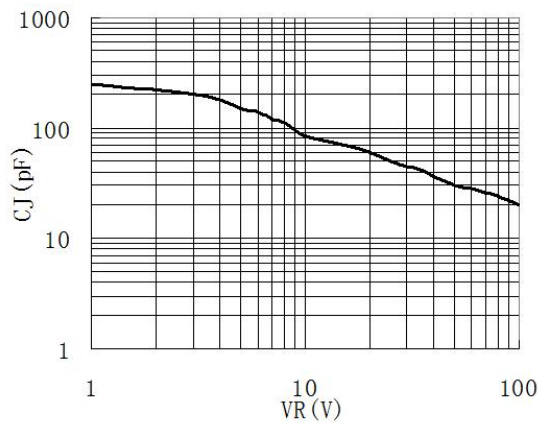
IF - VF



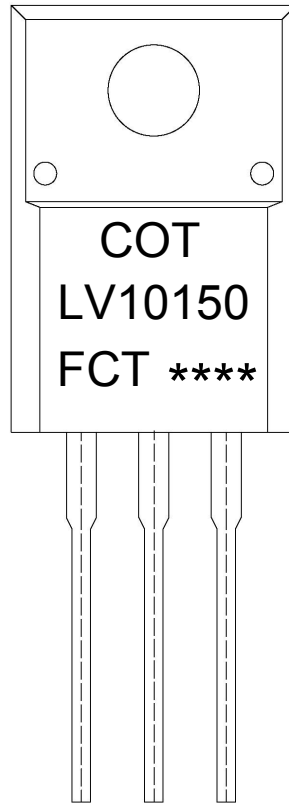
IR - VR



CJ - VR



Marking instructions



Note:

COT: Company Code
 LV10150: Product Type.
 F: Package Code
 CT: Internal Structure
 ****: Lot No. Code, code change with Lot No

Packaging SPEC.

BULK

Package Type	Units					Dimension (unit: mm ³)		
	Units/Bag	Bags/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

TUBE

Package Type	Units					Dimension (unit: mm ³)		
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

Package Dimensions.

T□-220F

单位: mm

