

# AuDXXXUXXXHTX

## **Smart Ideal Diode**

## Description

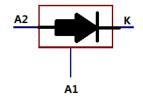
The Ideal didoe AuDXXXUXXXHTX series is designed for reducing power loss based on its very low forward voltage and providing anti-current backflow based on its unilateral conduction and good voltage ripple performance. To improve the current output performance, Multiple parts could be connected in parallel.

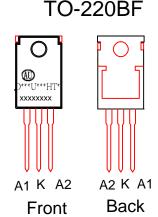
### **Features**

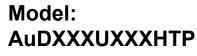
- \*Low Standy power to meet DOE Lot6 requirement
- \*Low power loss,high efficience,offers efficiency improvement over Schottky Diode
- \*simplifying the external circuit design
- \*supporting connection in parallel for more current capacity
- \*Supporting multiple outputs connected with power postive side to different batteries
- \*Good voltage ripple performance.

### **APPLICATIONS**

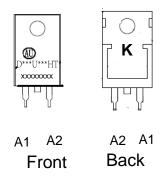
- Counter current protection in Charger
- Battery Management System
- Motor power reversal connection
- PV Cell protection
- PV chager circult protection







### TO-263-BF



Model: AuDXXXUXXXHTL

### PIN DESCRIPTION

111, 225 01111 1101,									
Pin	Symbol	Description							
1	A1	GND							
2	A2	DC current input.							
3	K	DC Current output							

### **Maximum Ratings and Electrical Characteristics**

Rating at 25  $^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%



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## **Smart Ideal Diode**

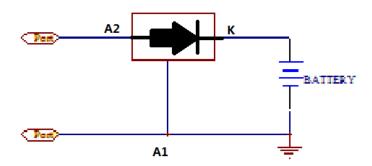
	VF (mV)	Vdc(V)	IF(av.) (A)	IFRM(A)	Iout(A)	Pd (W)	Toper (°C)
P/N	Typical forward vlotage IF=5A Ta=25℃	Maximum DC blocking voltage	Maximum average forward rectifier current Tc=100°C	Peak repetitive forward current	Suggested Load current	Max power dissipation	Operating temperature range
AUD40U80HTX	40	40	80	250	6	40	-40 to +125
AUD40U120HTX	15	40	120	300	10	40	-40 to +125
AUD40U160HTX	6	40	160	400	20	40	-40 to +125
AUD60U80HTX	50	60	80	250	5	40	-40 to +125
AUD60U150HTX	15	60	150	400	10	40	-40 to +125
AUD85U130HTX	20	85	130	250	10	40	-40 to +125
AUD101U40HTX	70	100	40	120	4	40	-40 to +125
AUD101U80HTX	40	100	80	250	10	40	-40 to +125
AUD101U141HTX	25	100	140	420	20	40	-40 to +125
AUD121U60HTX	30	120	60	200	6	40	-40 to +125
AU151U70HTX	60	150	70	200	5	40	-40 to +125
AU151U80HTX	35	150	80	250	8	40	-40 to +125

<sup>1.</sup>VF tested under the condition that power about 10V input to A1 pin and test the voltage between the A2 and K pin.

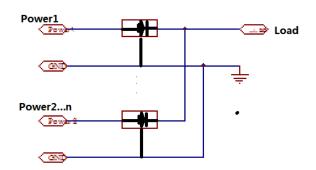
2. The "X" in model should be changed to "P" or "L" based on the package.

## Application:

1) Anti current back-flow:



2) Oring power output



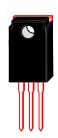


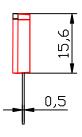
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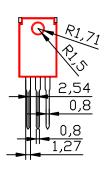
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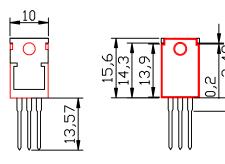
## DIMENSION INFORMATION (mm

# Package TO-220BF

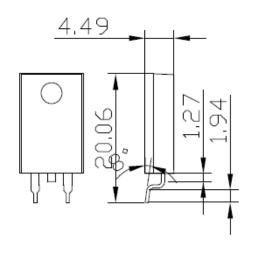


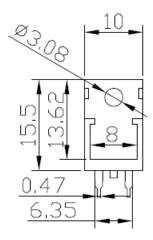






## Package TO -263BF





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