

Description

Au9676H-X series is designed for high efficient and Low power consumption rectifier in switching power second side. it is capable to work in CCM, DCM, CRM, used in Forward or Half-bridge topology power including LLC or hard-switching mode with no added adjustments, and it can support burst mode under no load or light load.

Especially, it can replace TO220/F Schottky Diodes and SR mosfets directly in second side.

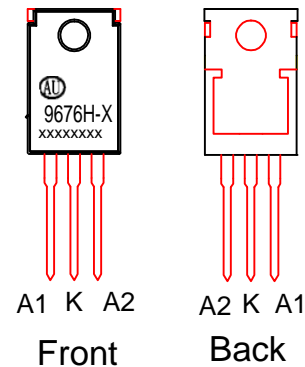
Features

- *Operating frequency up to 300KHz.
- *Low power loss, high efficiency, offers efficiency improvement over Schottky Diode
- *simplifying the external circuit design
- *No change on transformer, no Vcc auxiliary winding needed
- * Work well both in high-side and low-side in isolated flyback power.

APPLICATIONS

- Switching Mode Power Supply
- Storage area network power supplies
- Telecommunication converters
- Embedded systems
- Industrial & commercial systems using high current processors

TO-220BF



PIN DESCRIPTION

Pin	Symbol	Description
1	A1	assistant current input.
2	A2	main current input.
3	K	Current output

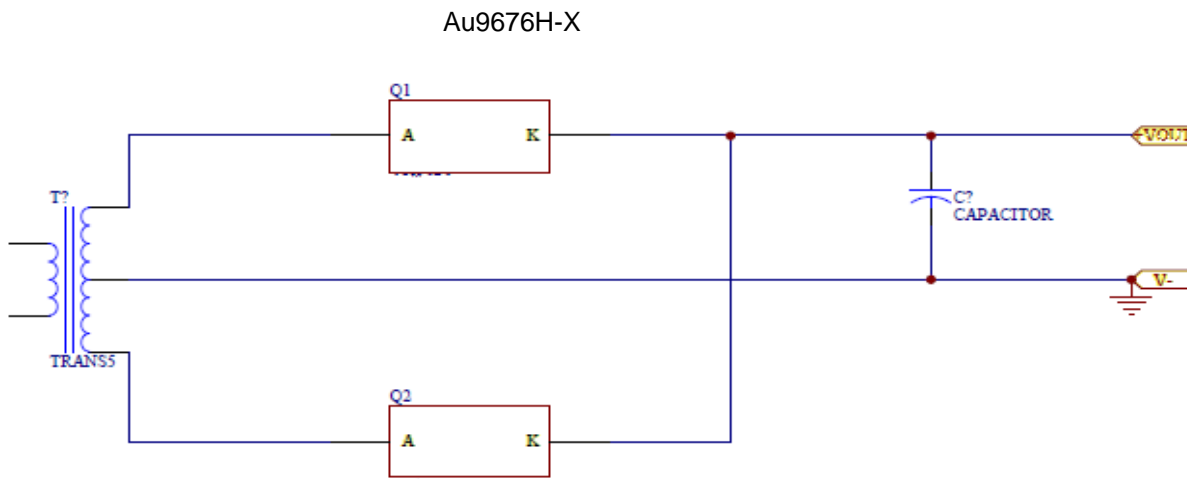
Maximum Ratings and Electrical Characteristics

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

P/N	VF (mV)	Vdc (V)	IF (av.) (A)	IFRM (A)	Iout (A)	Pd (W)	Tstg (°C)
	Typical forward voltage IF=5A Ta=25°C Vout=12V	Maximum DC blocking voltage	Maximum average forward rectifier current Tc=100°C	Peak repetitive forward current	Suggested Load current	Max power dissipation	Storage temperature range
AU9676H-J	6	30	120	480	40	40	-40 to +125
AU9676H-L	40	40	60	240	6	40	-40 to +125
AU9676H-F	24	40	80	320	10	40	-40 to +125
AU9676H-A	18	40	120	480	15	40	-40 to +125
Au9676H-G	10	40	200	600	30	40	-40 to +125
AU9676H-H	80	60	80	320	12	40	-40 to +125
AU9676H-K	12	60	150	600	25	40	-40 to +125
AU9676H-M	10	85	130	390	30	40	-40 to +125
AU9676H-B	45	100	40	160	10	40	-40 to +125
AU9676H-C	30	100	80	320	20	40	-40 to +125
AU9676H-D	25	100	100	380	25	40	-40 to +125
AU9676H-S	10	100	140	420	30	40	-40 to +125
Au9676H-N	50	150	50	130	6	40	-40 to +125
AU9676H-E	60	150	80	300	12	40	-40 to +125
AU9676H-V	35	150	80	300	20	40	-40 to +125

Application

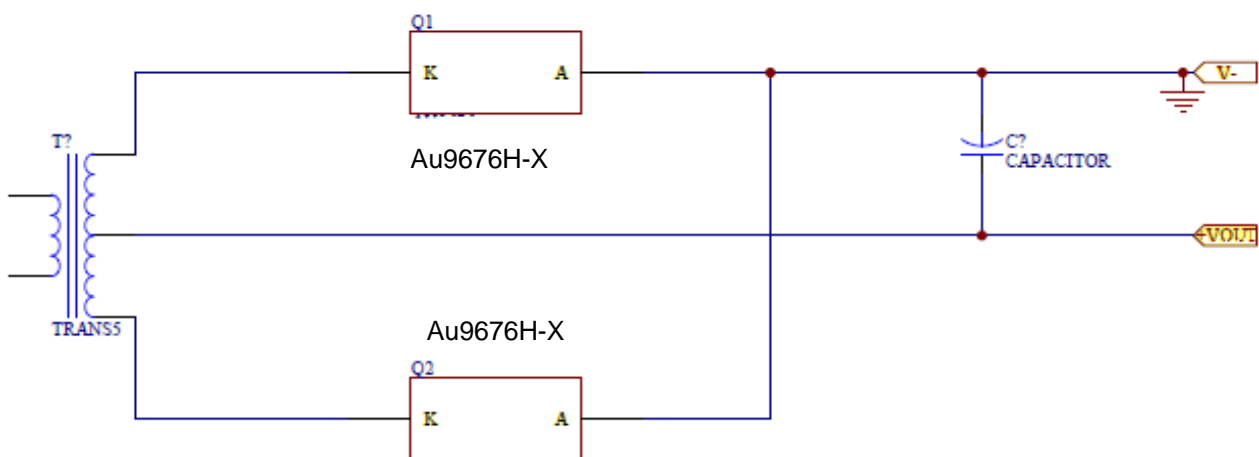
a.



Application Note :

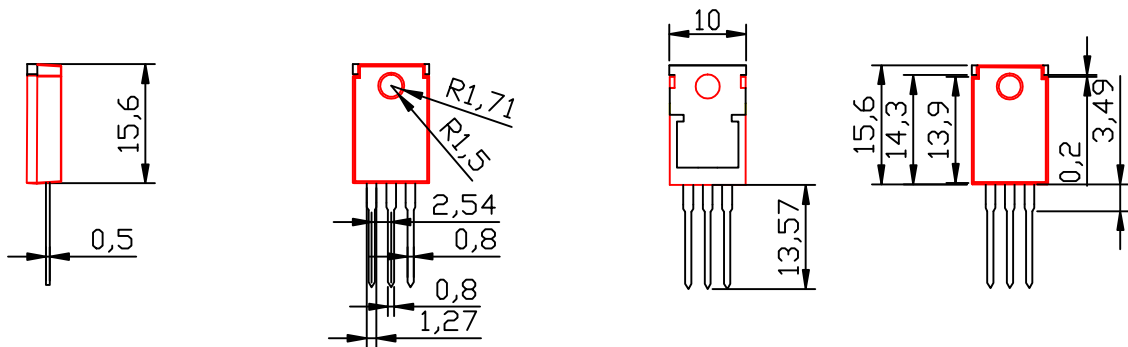
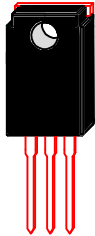
If possible, it is a good way connecting heat sink to output capacitor cathode directly without insulating collidal particle and heat conductive gasket between the smart rectifier and the heat sink, that could save the cost and improve EMI performance , and decrease the leakage current between the smart rectifier and heat sink to get higher efficiency and lower Vakpeak voltage too.

b.



DIMENSION INFORMATION (mm)

Package TO-220BF



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