

Description

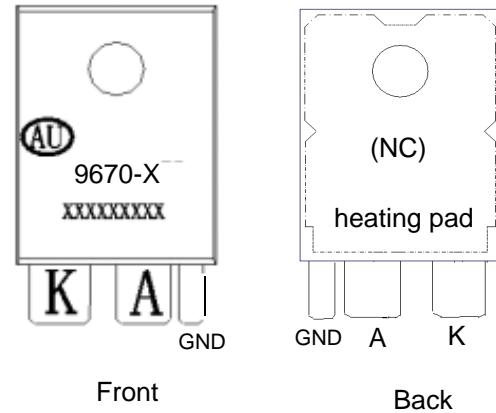
Au9670 is designed for high efficient and Low power consumption rectifier in switching power second side. it is capable to work in CCM, DCM, CRM, used in flyback, QR and forward topology directly with no more added adjustments

Features

- *Operating frequency up to 300KHz.
- *Low Standy power to meet DOE Lot6 requirement
- *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

APPLICATIONS

- Switching Mode Power Supply (CCM&DCM&QR)
- Storage area network power supplies
- Telecommunication converters
- Embedded systems
- Industrial & commercial systems using high current processors
- Power converters to meet Lot 6 requirement



PIN DESCRIPTION

Pin	Symbol	Description
1	GND	Ground connection.
2	A	current Input.
3	K	Current output

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

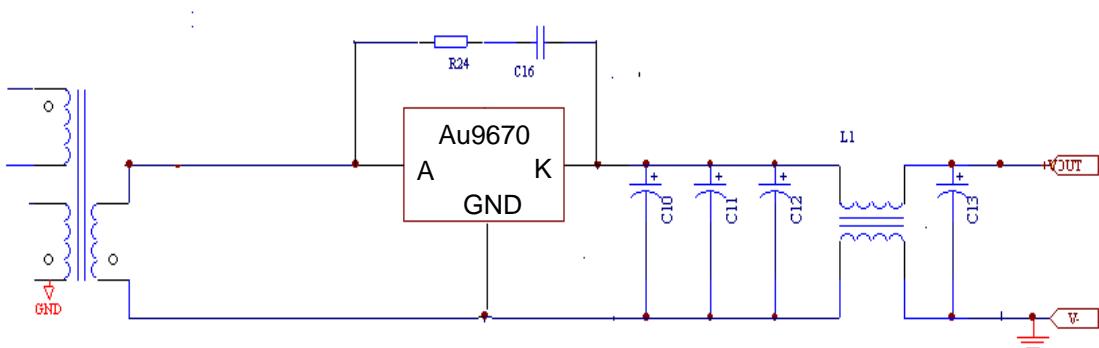
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

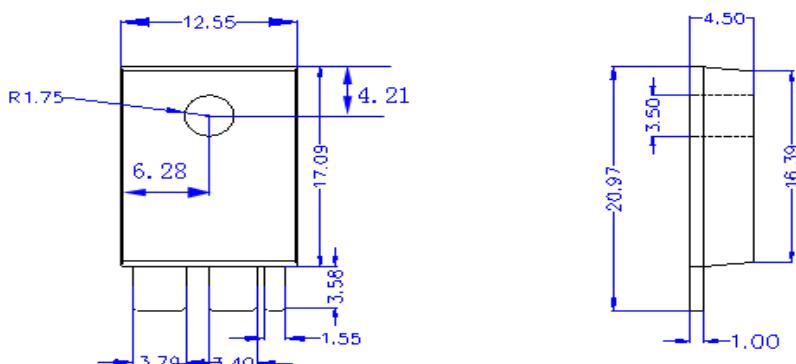
Type Number	Symbol	Au9670 -L	Au9670 -O	Au9670 -R	Au9670 -W	Au9670 -S	Au9670 -H	Au9670 -T	Au9670 -Y	Au9670 -J	Au9670 -N	Au9670 -A	Au9670 -F	Au9670 -B	Au9670 -C	Unit	
Maximum DC blocking voltage	V _{DC}	40	40	40	40	60	60	60	60	100	100	100	100	150	150	V	
Maximum Average Forward Rectified Current T _c =100	I _{F(AV)}	10	13	14	27	7	14	16	60	9	12	60	100	36	6	A	
Peak Repetitive Forward Current	I _{FRM}	60	70	60	155	40	110	130	300	50	60	250	380	100	42	A	
Typical Forward Voltage IF=5A, TA=25 °C Vout=12V	VF	0.04	0.024	0.02	0.012	0.055	0.08	0.015	0.012	0.06	0.04	0.035	0.029	0.11	0.15	*	V
Typical Forward Voltage IF=5A, TA=25°C Vout=5V	VF	0.055	0.048	0.025	0.0165	0.068	0.05	0.02	0.016	0.07	0.048						V
Suggested Load current	I _{out}	4	6	8	12	4	5	8.4	12	3	4	7	10	5	3	A	
Max power dissipation	P _d									40						W	
Storage Temperature Range	T _{STG}										-25 to + 150					°C	

* Tested under the condition IF=3A

1. Application in flyback



DIMENSION INFORMATION (mm)



FOOTPRINT

