

◆ **Features:**

- ◇ High switching frequency  
开关频率高
- ◇ Low forward voltage drop  
正向压降低
- ◇ High efficiency and low power loss  
高效低功耗
- ◇ High volume of current and good capability of surge current  
大电流浪涌能力强

◆ **Applications**

- ◇ High frequency rectifier of switching mode power supplies  
高频整流器开关电源
- ◇ Freewheeling diodes  
续流二极管
- ◇ Polarity protection application  
极性保护应用
- ◇ DC-DC converters  
直流-直流变换器

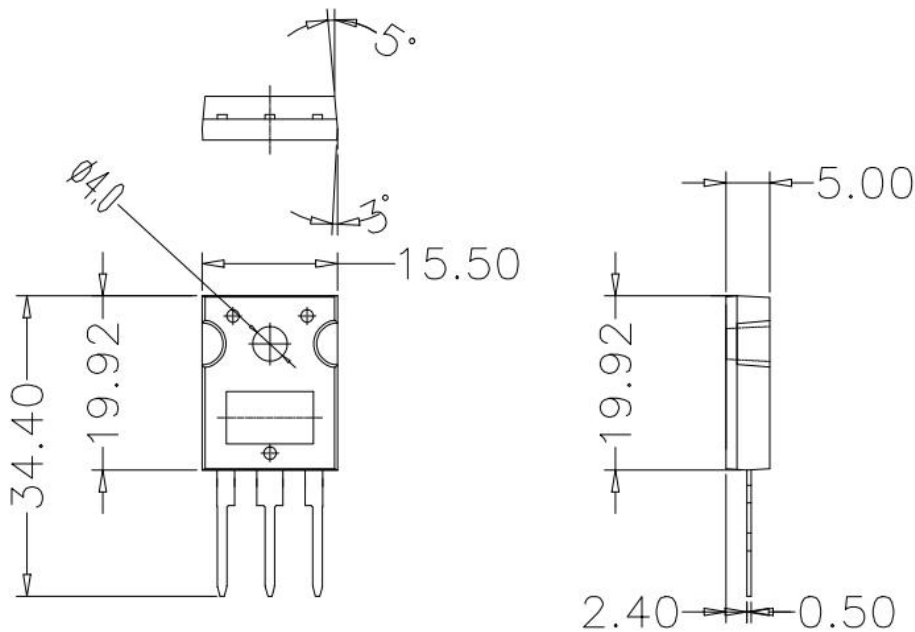
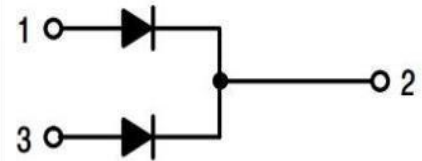


**TO-247S**



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**PIN CONNECTIONS**



**◆ Absolute Maximum Ratings (Tc=25°C)**

Symbol	Parameters	Ratings	Unit
$V_{RRM}$	Repetitive Peak Reverse Voltage 最大反向重复峰值电压	<b>150</b>	V
$V_{RWM}$	Working peak reverse voltage 反向峰值工作电压	<b>150</b>	V
$V_R$	Maximum DC blocking voltage 最大直流反向电压	<b>150</b>	V
$I_{F(AV)}$	Maximum average forward rectified current Total device 最大正向平均电流	<b>40</b>	A
$I_{FSM}$	Peak Forward Surge Current 正向峰值浪涌电流	<b>320</b>	A
$T_j$	Operating junction temperature range 结温	<b>175</b>	°C
$T_{stg}$	Storage temperature range 贮存温度	<b>-55~175</b>	°C

**◆ Electrical characteristics**

Symbol	Parameters	Min	Typical	Max	Units	Conditions
$I_R$	Maximum Reverse Leakage Current (Note 1) 最大反向瞬态电流	--	--	<b>5</b>	uA	$V_R = V_{RRM}$ $T_C = 25\text{ °C}$
$V_F$	Maximum Instantaneous Forward Voltage (Note 2) 最大瞬态正向压降	--	<b>0.83</b>	<b>0.85</b>	V	$I_F = 16A, T_C = 25\text{ °C}$
$R_{th(j-c)}$	Typical Thermal Resistance, Junction to Case 结到外壳的典型热阻	--	--	<b>1.3</b>	°C/W	
dV/dt	Voltage Rate of Change 电压变化率	--	--	<b>10000</b>	V/μs	

Note 1: 2.0uS Pulse Width, f=1.0KHz

Note 2: Pulse Test : 300us Pulse Width, 1% Duty Cycle