

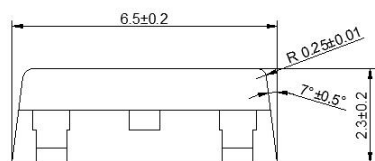
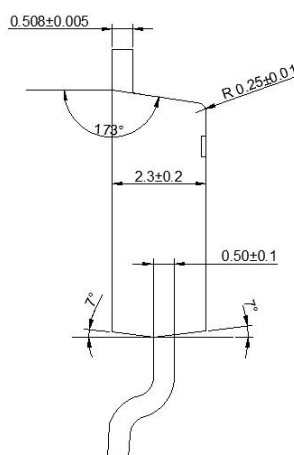
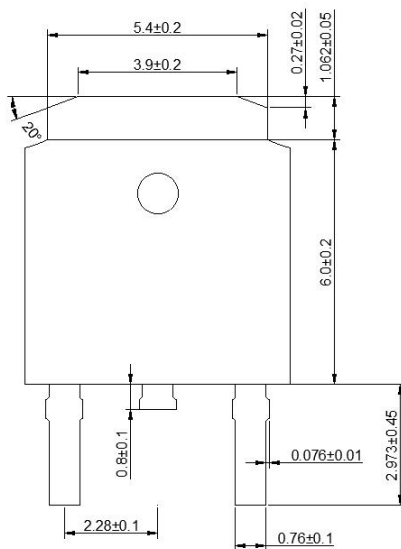
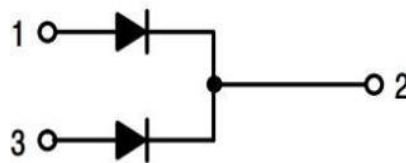
**◆ Features:**

- ◇ Super fast recovery time. high voltage  
快恢复时间，高电压
- ◇ 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-252**

**PIN CONNECTIONS**

 单位: mm  
**TO-252**

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

Symbol	Parameters	Ratings	Unit
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage 最大反向重复峰值电压	<b>300</b>	V
V <sub>RWM</sub>	Working peak reverse voltage 反向峰值工作电压	<b>300</b>	V
V <sub>R</sub>	Maximum DC blocking voltage 最大直流反向电压	<b>300</b>	V
I <sub>F(AV)</sub>	Maximum average forward rectified current Total device 最大正向平均电流	<b>20</b>	A
I <sub>FSM</sub>	Peak Forward Surge Current (Per Leg) 正向峰值浪涌电流	<b>100</b>	A
T <sub>j</sub>	Operating junction temperature range 结温	<b>175</b>	°C
T <sub>stg</sub>	Storage temperature range 贮存温度	<b>-55~175</b>	°C

**◆ Electrical characteristics**

Symbol	Parameters	Min	Typical	Max	Units	Conditions
I <sub>R</sub>	Maximum Reverse Leakage Current (Note 1) 最大反向瞬态电流	--	--	<b>2</b>	μA	V <sub>R</sub> =V <sub>RR</sub> T <sub>C</sub> =25 °C
V <sub>F</sub>	Maximum Instantaneous Forward Voltage (Note 2) Per Leg 最大瞬态正向压降	--	<b>1.0</b>	--	V	I <sub>F</sub> =10A, T <sub>C</sub> = 25 °C
R <sub>th(j-c)</sub>	Typical Thermal Resistance, Junction to Case 结到外壳的典型热阻	--	--	<b>1.7</b>	°C/W	
dV/dt	Voltage Rate of Change 电压变化率	--	--	<b>10000</b>	V/μs	
T <sub>rr</sub>	Maximum Reverse Recovery Time 最大反向恢复时间		<b>25</b> <b>19</b>		ns	I <sub>F</sub> =1.0A, V <sub>R</sub> =30V, di/dt=200A/us I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>REC</sub> =0.25A

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

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