

## Fast Recovery Diode

# 30GFA20



DO-201AD



### ■ 特長 / Features

- ・ 高速trr  
Fast recovery time
- ・ 低IR  
Low leakage current
- ・ ソフトリカバリー  
Soft recovery
- ・ RoHS指令対応、ハロゲンフリー  
RoHS compliant, Halogen-free
- ・ エポキシ樹脂 (UL94V-0 認定品)  
Epoxy Resin (UL94V-0 recognized)

### ■ アプリケーション / Applications

- ・ DC/DCコンバータ  
DC/DC converters
- ・ AC/DC電源  
AC/DC power supplies

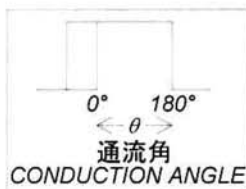
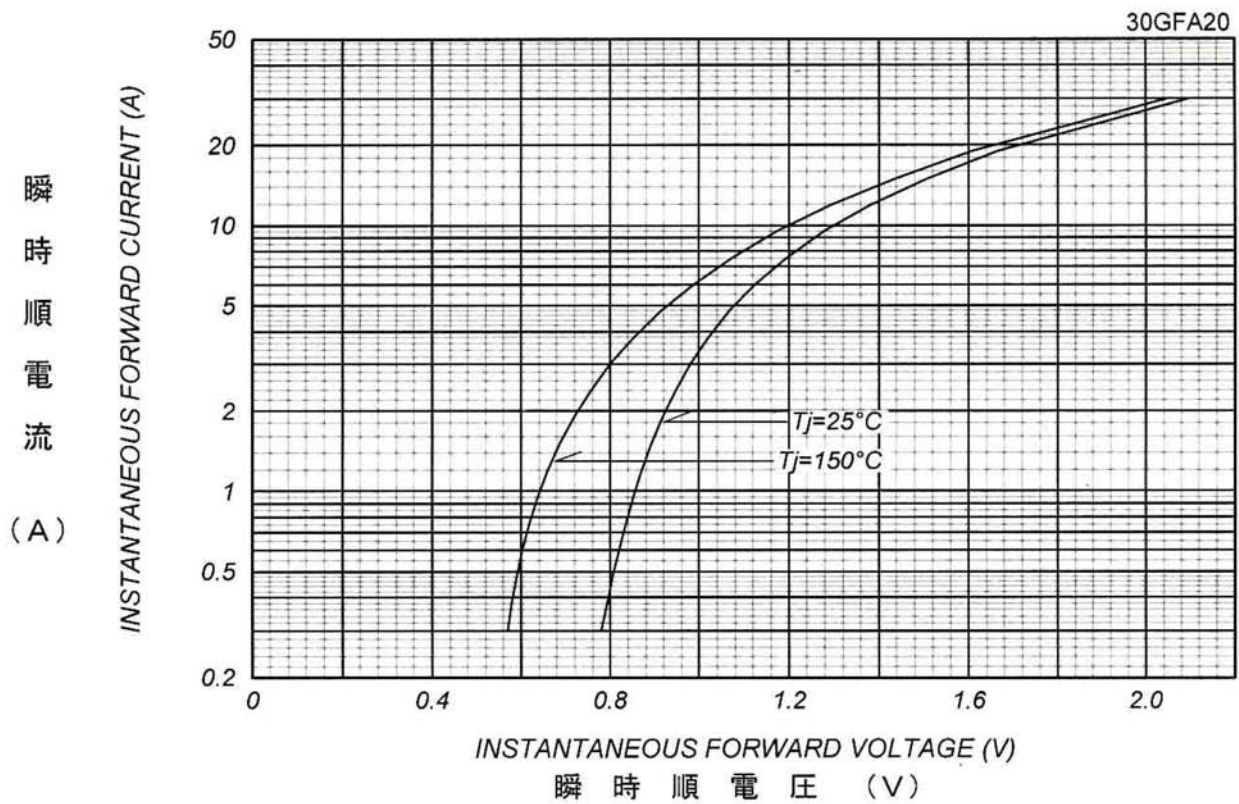
### ■ 最大定格 / Maximum ratings

| Parameter                                        | Symbol    | Conditions                                                      | Limits     | Unit               |
|--------------------------------------------------|-----------|-----------------------------------------------------------------|------------|--------------------|
| くり返しピーク逆電圧<br>Repetitive Peak Reverse Voltage    | $V_{RRM}$ |                                                                 | 200        | V                  |
| 平均整流電流<br>Average Rectified Output Current       | $I_O$     | $T_I=107^{\circ}\text{C}$                                       | 3.0        | A                  |
| サージ順電流<br>Surge Forward Current                  | $I_{FSM}$ | 50Hz 正弦半波、1サイクル、非くり返し<br>Half Sine Wave, 1cycle, Non-repetitive | 60         | A                  |
| 動作接合温度範囲<br>Operating Junction Temperature Range | $T_{jw}$  |                                                                 | -40 ~ +150 | $^{\circ}\text{C}$ |
| 保存温度範囲<br>Storage Temperature Range              | $T_{stg}$ |                                                                 | -40 ~ +150 | $^{\circ}\text{C}$ |

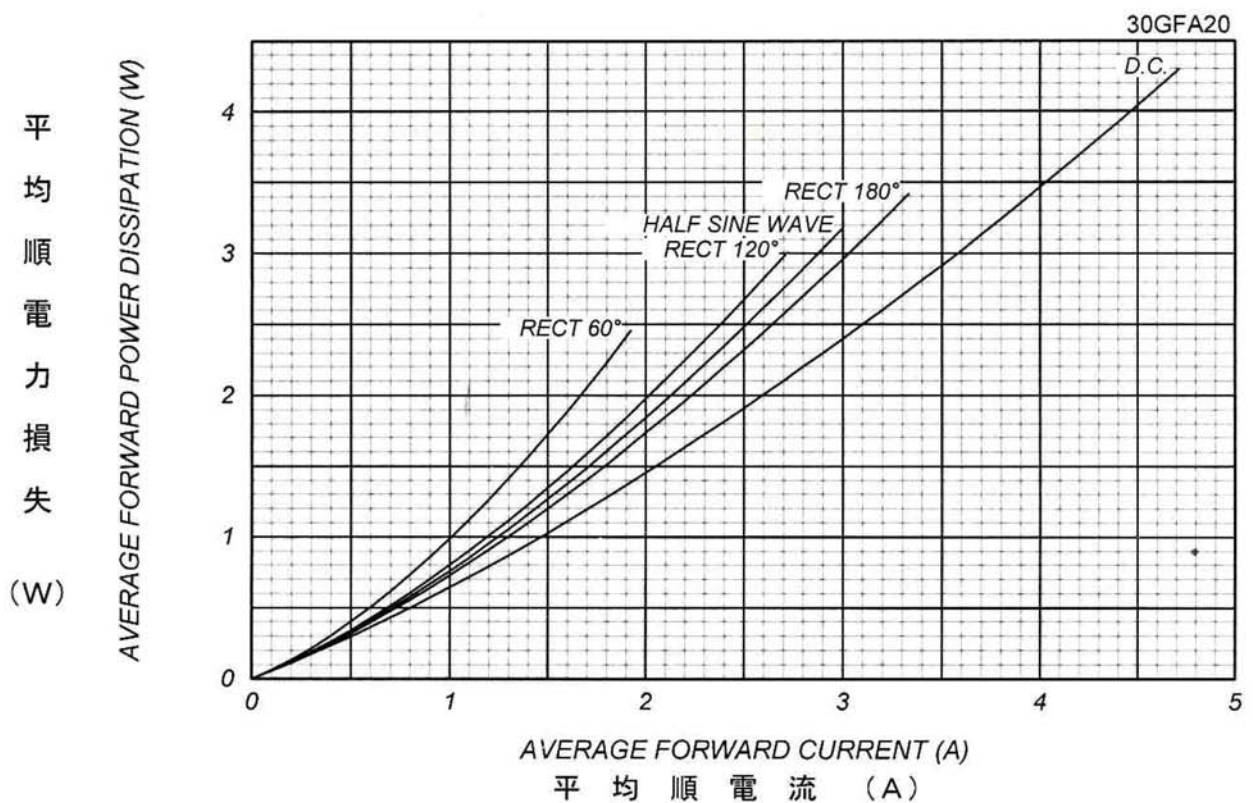
### ■ 電気的特性 / Electrical characteristics

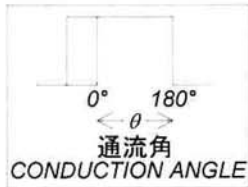
| Parameter                      | Symbol   | Conditions                                                                  | Min. | Typ. | Max. | Unit                        |
|--------------------------------|----------|-----------------------------------------------------------------------------|------|------|------|-----------------------------|
| ピーク逆電流<br>Peak Reverse Current | $I_{RM}$ | $V_{RM}=V_{RRM}$ $T_j=25^{\circ}\text{C}$                                   | -    | -    | 0.01 | mA                          |
| ピーク順電圧<br>Peak Forward Voltage | $V_{FM}$ | $I_{FM}=3\text{A}$ $T_j=25^{\circ}\text{C}$                                 | -    | -    | 0.98 | V                           |
| 逆回復時間<br>Reverse recovery time | $t_{rr}$ | $I_{FM}=3\text{A}$ $T_j=25^{\circ}\text{C}$ $-di/dt=50\text{A}/\mu\text{s}$ | -    | -    | 30   | ns                          |
| 熱抵抗<br>Thermal Resistance      | $R_{th}$ | 接合部ーリード間<br>Junction to Lead                                                | -    | -    | 13.0 | $^{\circ}\text{C}/\text{W}$ |

順電圧特性  
FORWARD CURRENT VS. VOLTAGE

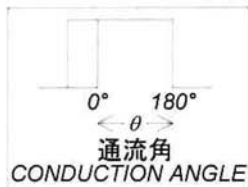
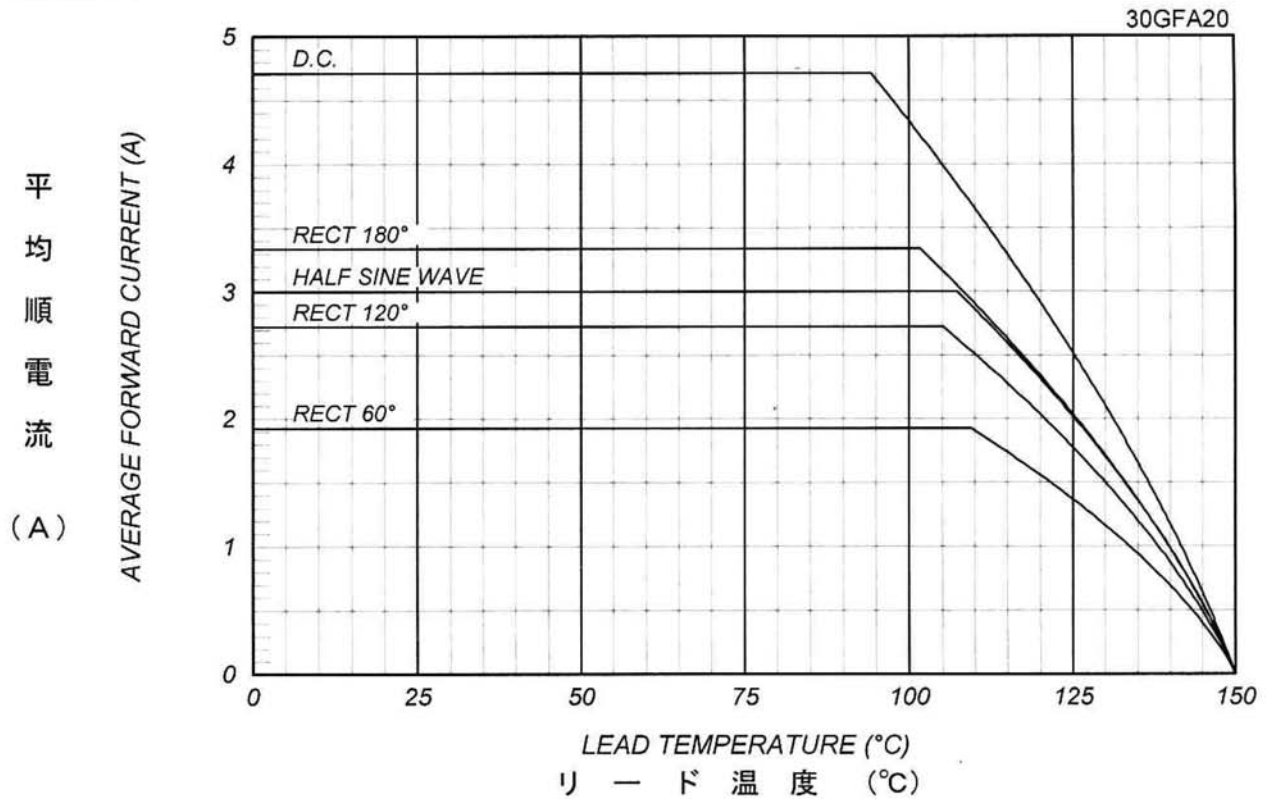


平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION



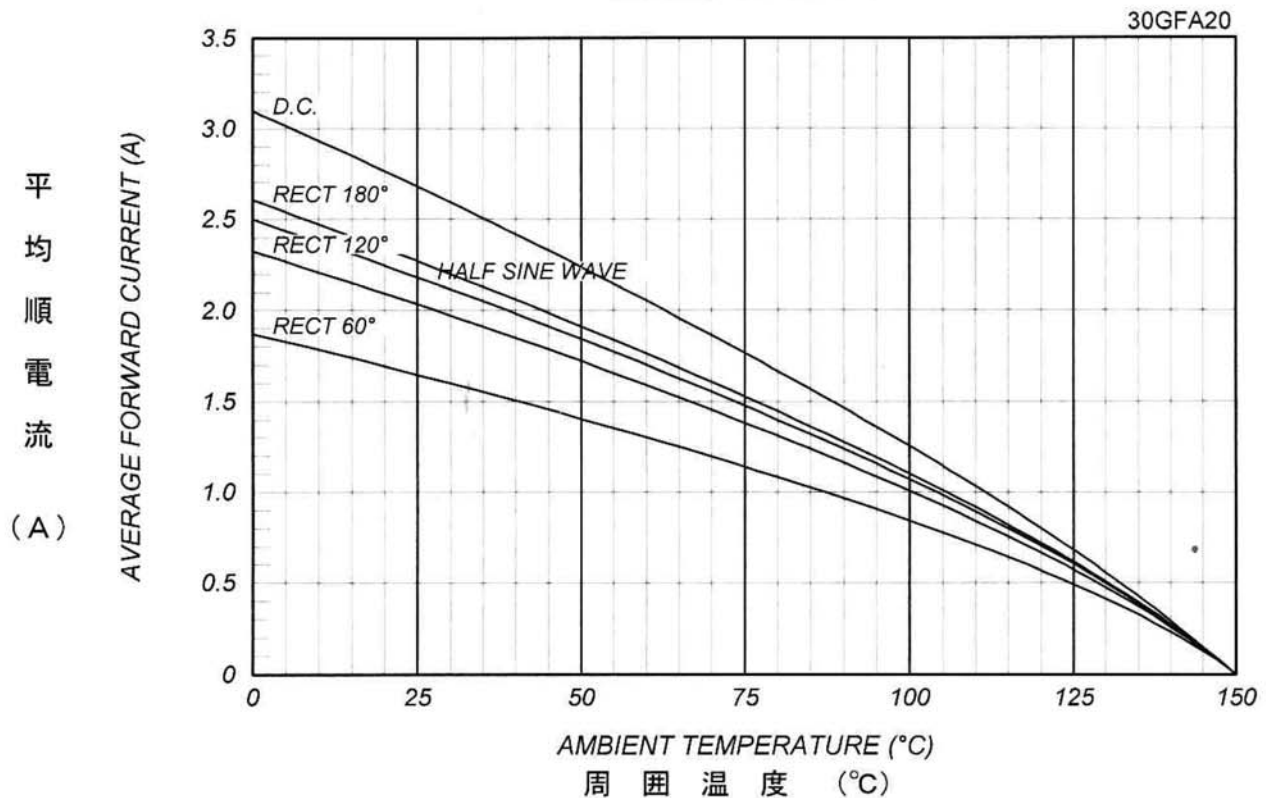


平均順電流－リード温度定格  
AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE



平均順電流－周囲温度定格  
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C.Board



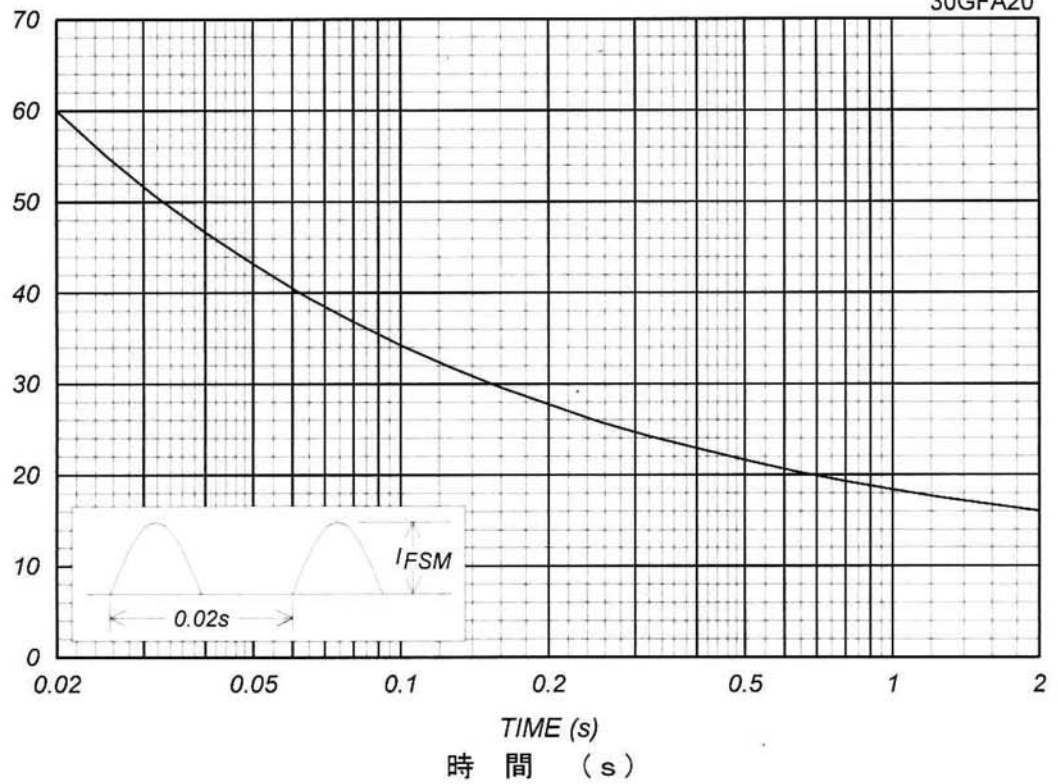
# サージ順電流定格 SURGE CURRENT RATINGS

f=50Hz, Half Sine Wave, Non-Repetitive, No Load

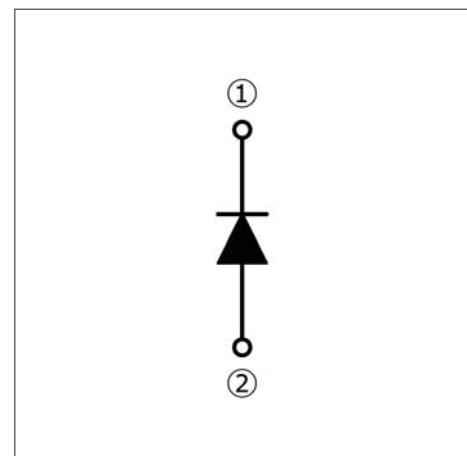
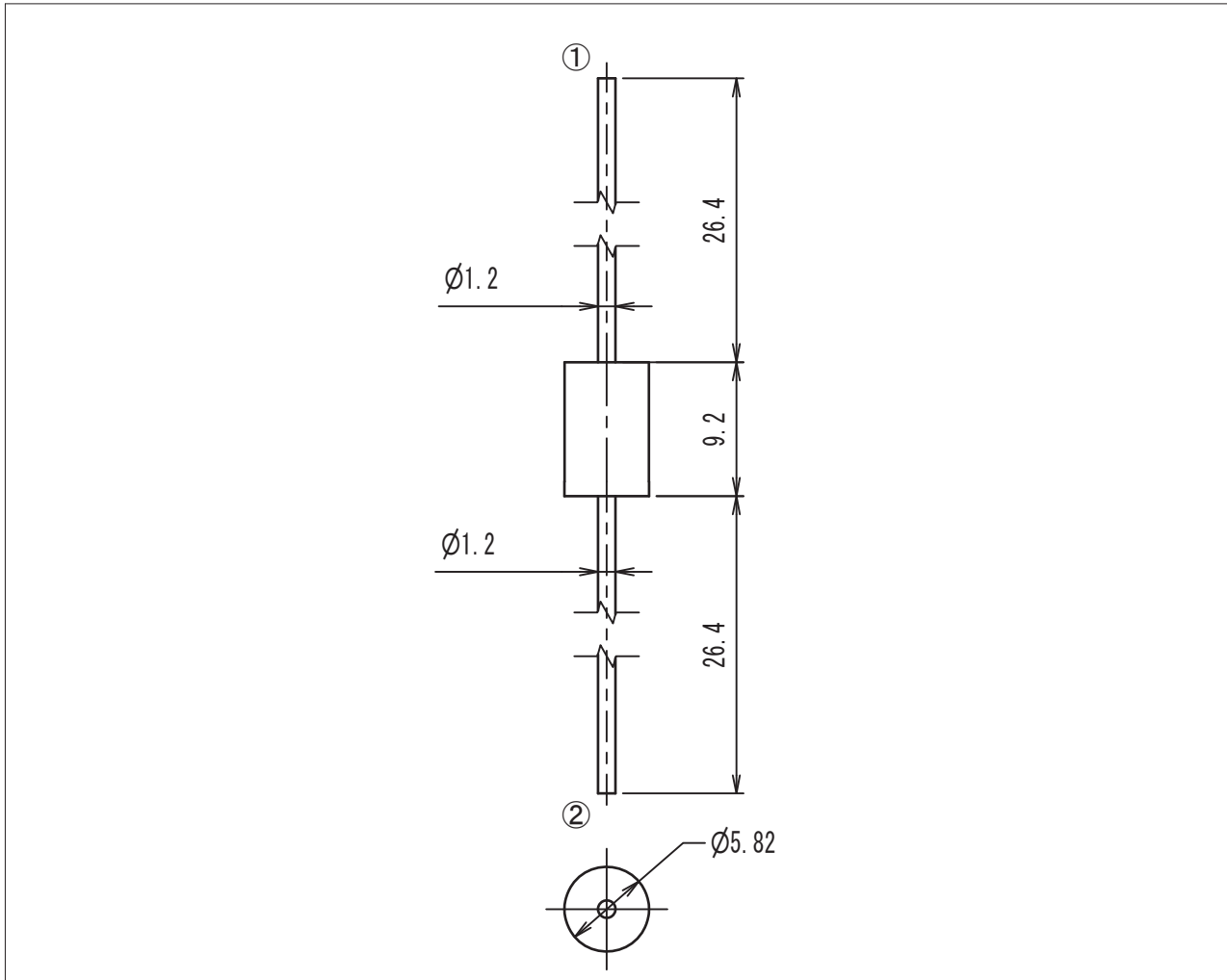
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SURGE FORWARD CURRENT (A)



**DO-201AD**



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【Standard applications】  
Computers, office automation and other office equipment, communication terminals, test and measurement equipment, audio/visual equipment, amusement equipment, consumer electronics, machine tools, personal electronic equipment, industrial equipment, etc.

【特別用途】  
輸送機器(車載、船舶等)、基幹用通信機器、交通信号機器、防災/防犯機器、各種安全機器、医療機器等

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【特定用途】  
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【Specific applications】  
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