

#### ●Serie

Standard Fast Recovery

#### ●Application

General rectification

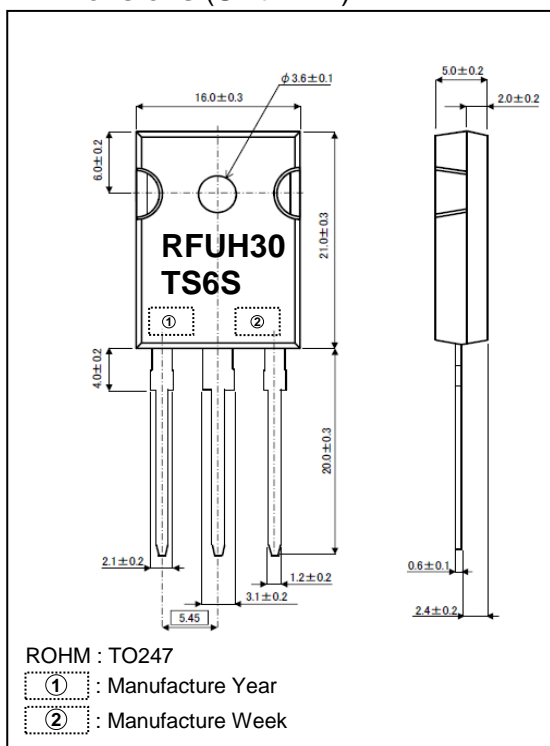
#### ●Features

- 1) Ultra low switching loss
- 2) High current overload capacity

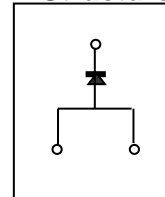
#### ●Construction

Silicon epitaxial planar type

#### ●Dimensions (Unit : mm)



#### ●Structure



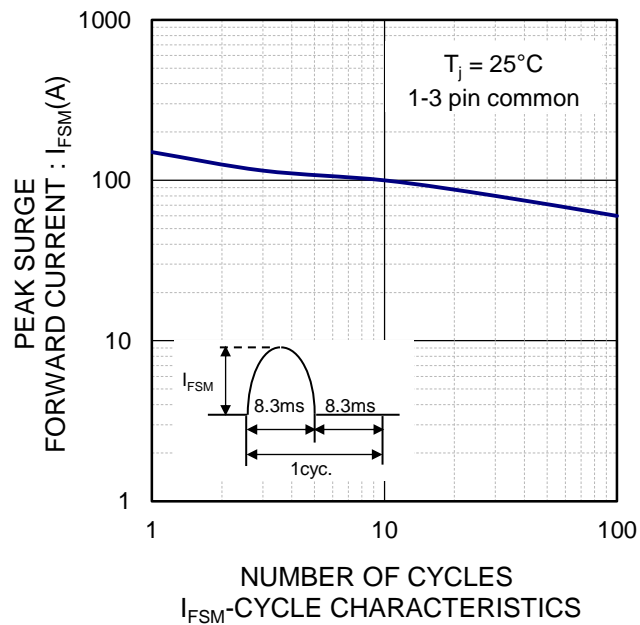
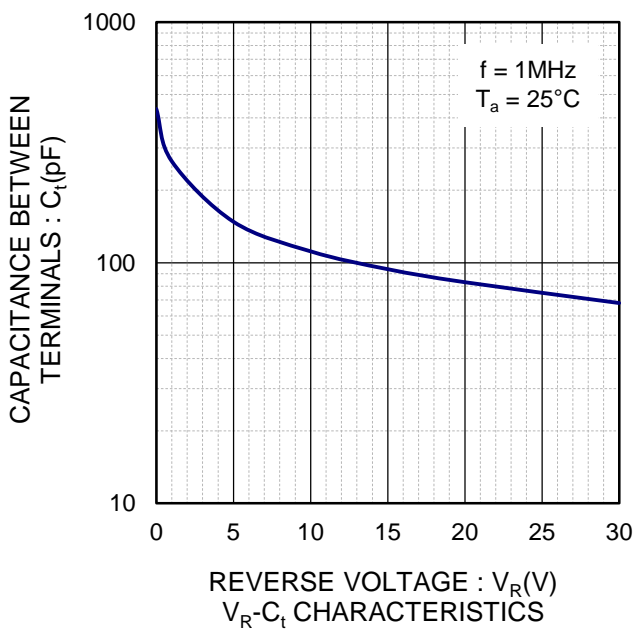
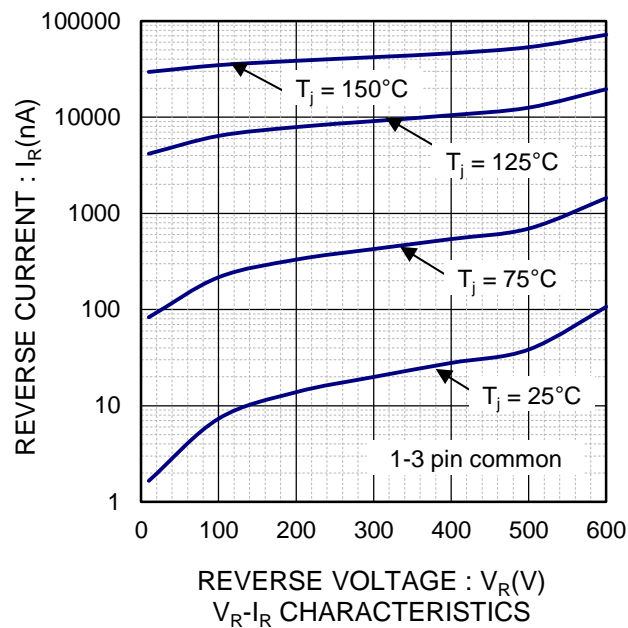
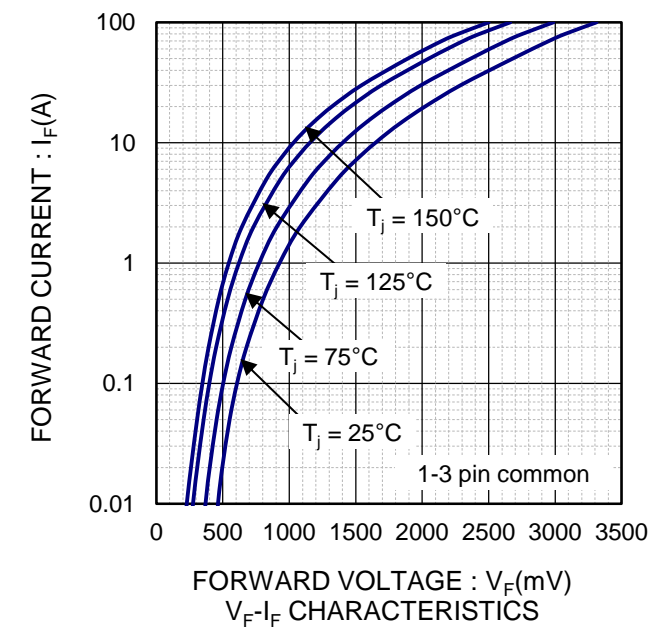
#### ●Absolute maximum ratings ( $T_c = 25^\circ\text{C}$ )

| Parameter                            | Symbol    | Conditions  | Limits      | Unit             |
|--------------------------------------|-----------|---|-------------|------------------|
| Repetitive peak reverse voltage      | $V_{RM}$  | Duty $\leq 0.5$   | 600         | V                |
| Reverse voltage                      | $V_R$     | Direct voltage  | 600         | V                |
| Average current                      | $I_o$     | 60Hz half sin wave, Resistive load $T_c = 85^\circ\text{C}$                     | 30          | A                |
| Non-repetitive forward surge current | $I_{FSM}$ | 60Hz half sin wave, Non-repetitive at $T_j = 25^\circ\text{C}$ , 1-3 pin common | 150         | A                |
| Operating junction temperature       | $T_j$     | -   | 150         | $^\circ\text{C}$ |
| Storage temperature                  | $T_{stg}$ | -   | -55 to +150 | $^\circ\text{C}$ |

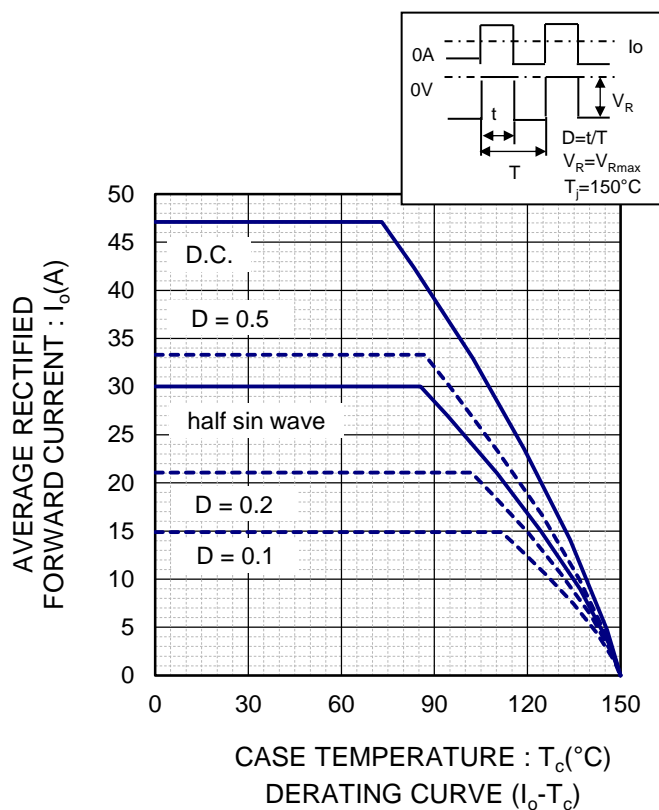
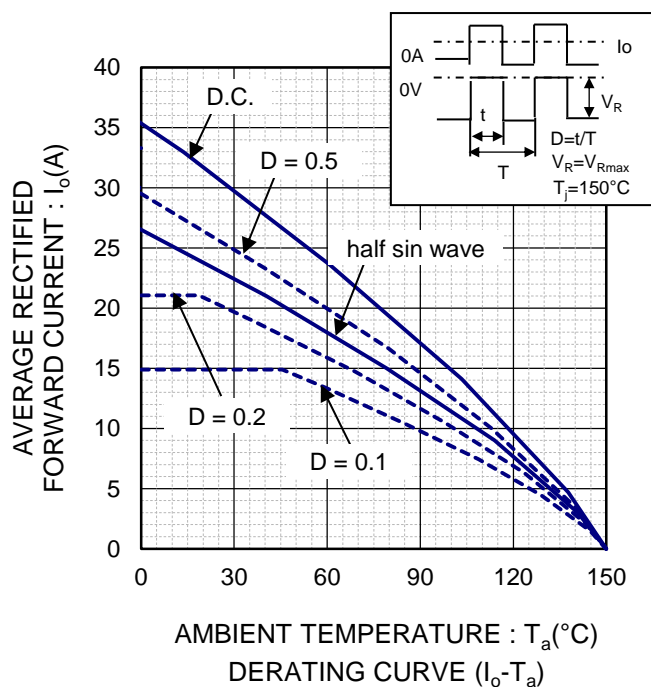
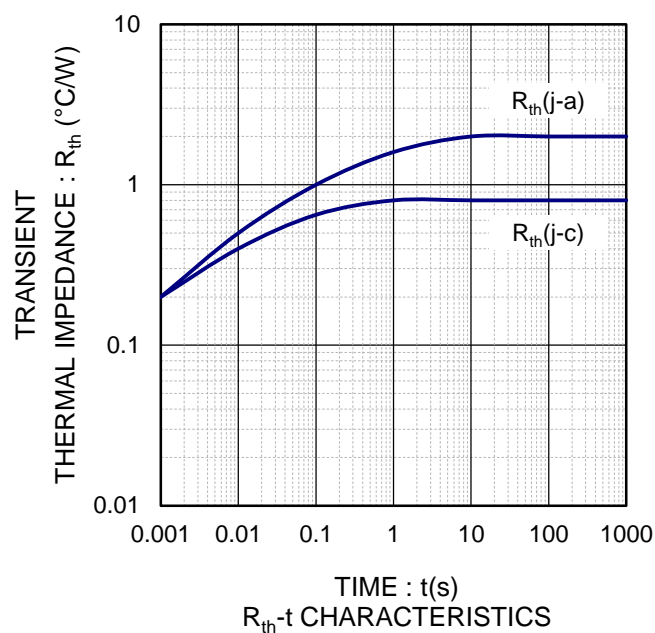
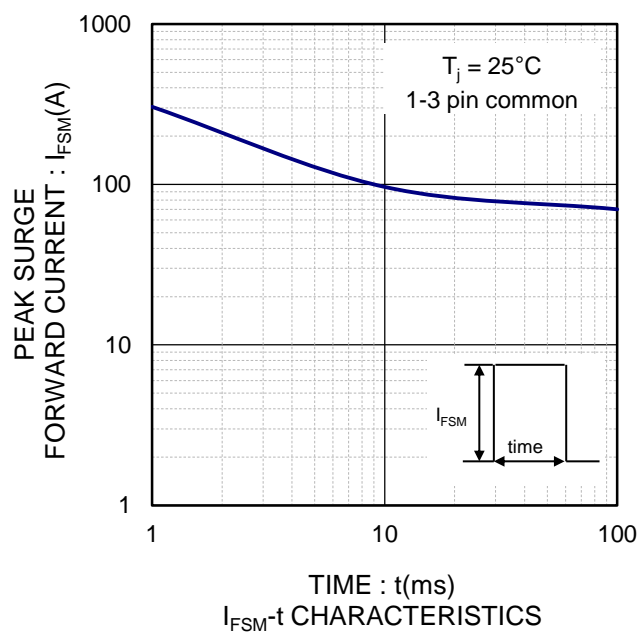
#### ●Electrical characteristics ( $T_j = 25^\circ\text{C}$ )

| Parameter             | Symbol        | Conditions   | Min. | Typ. | Max. | Unit                        |
|-----------------------|---------------|--|------|------|------|-----------------------------|
| Forward voltage       | $V_F$         | $I_F = 30\text{A}$   | 1.5  | 2.2  | 2.8  | V                           |
| Reverse current       | $I_R$         | $V_R = 600\text{V}$  | -    | 0.1  | 10   | $\mu\text{A}$               |
| Reverse recovery time | $t_{rr}$      | $I_F = 0.5\text{A}, I_R = 1\text{A}, I_{rr} = 0.25 \times I_R$ | -    | 25   | 35   | ns                          |
| Thermal resistance    | $R_{th(j-c)}$ | Junction to case   | -    | -    | 0.8  | $^\circ\text{C} / \text{W}$ |

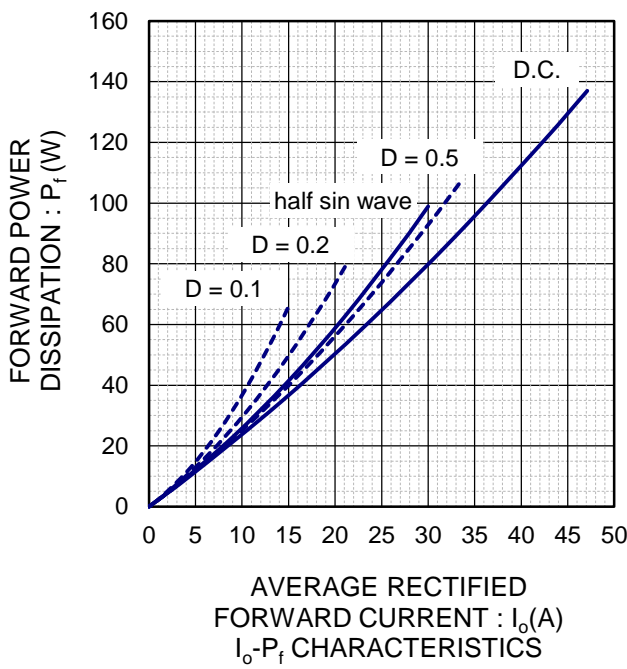
●Electrical characteristic curves



### ●Electrical characteristic curves



●Electrical characteristic curves



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