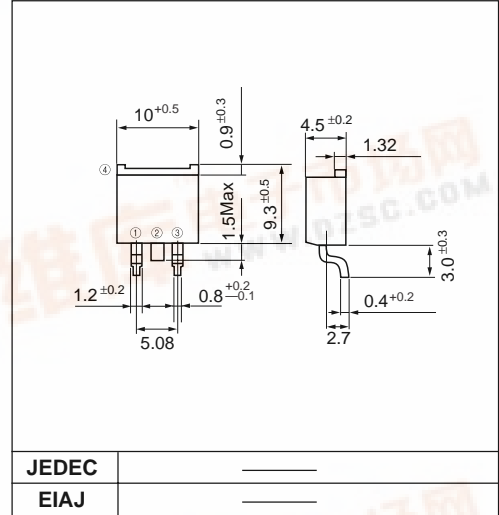


# TS906C2 (20A)

( 200V / 20A )

## LOW LOSS SUPER HIGH SPEED RECTIFIER

## Outline drawings, mm



## Features

- Surface-mount device
- Low VF
- Super high speed switching
- High reliability by planer design

## Applications

- High speed power switching

## Maximum ratings and characteristics

- Absolute maximum ratings

| Item                            | Symbol    | Conditions                                | Rating      | Unit        |
|---------------------------------|-----------|---|-------------|-------------|
| Repetitive peak reverse voltage | $V_{RRM}$ |   | 200         | V           |
| Average output current          | $I_o$     | Square wave, duty=1/2, $T_c=112^{\circ}C$ | 20*         | A           |
| Surge current                   | $I_{FSM}$ | Sine wave 10ms                            | 80          | A           |
| Operating junction temperature  | $T_j$     |   | -40 to +150 | $^{\circ}C$ |
| Storage temperature             | $T_{stg}$ |   | -40 to +150 | $^{\circ}C$ |

\* Average forward current of centertap full wave connection

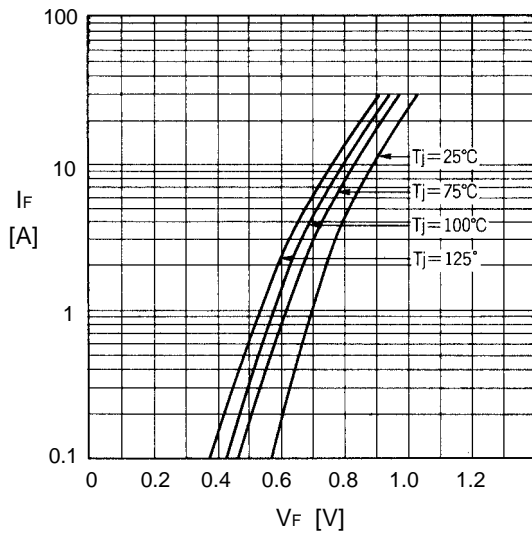
- Electrical characteristics ( $T_a=25^{\circ}C$  Unless otherwise specified)

| Item                  | Symbol        | Conditions                          | Max. | Unit          |
|-----------------------|---------------|-------------------------------------|------|---------------|
| Forward voltage drop  | $V_{FM}$      | $I_{FM}=10A$                        | 0.98 | V             |
| Reverse current       | $I_{RRM}$     | $V_R=V_{RRM}$                       | 200  | $\mu A$       |
| Reverse recovery time | $t_{rr}$      | $I_F=0.1A, I_R=0.2A, I_{rec}=0.05A$ | 35   | ns            |
| Thermal resistance    | $R_{th(j-c)}$ | Junction to case                    | 2.0* | $^{\circ}C/W$ |

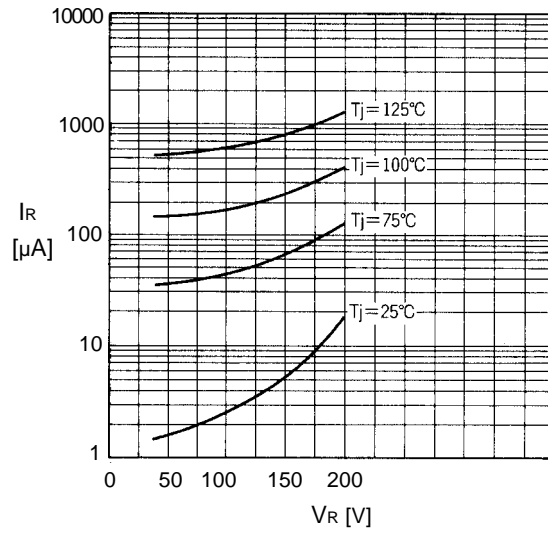


■ Characteristics

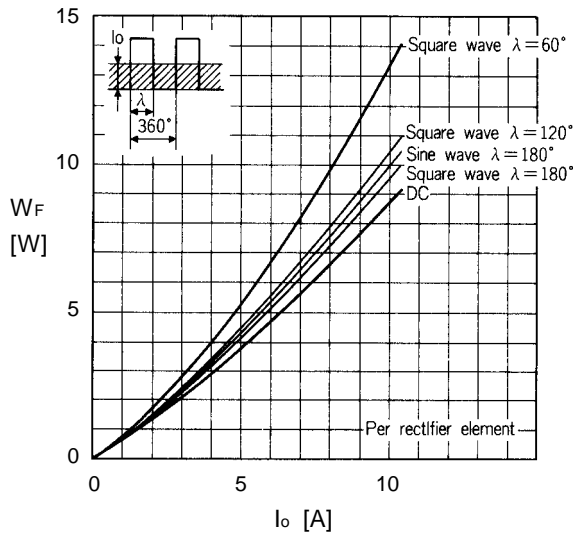
Forward characteristics



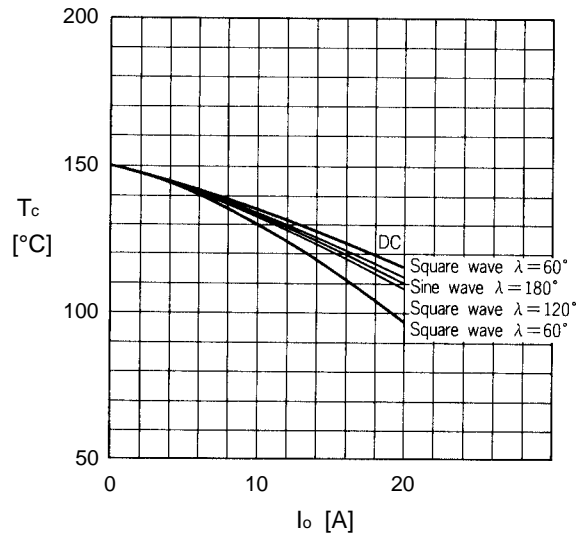
Reverse characteristics



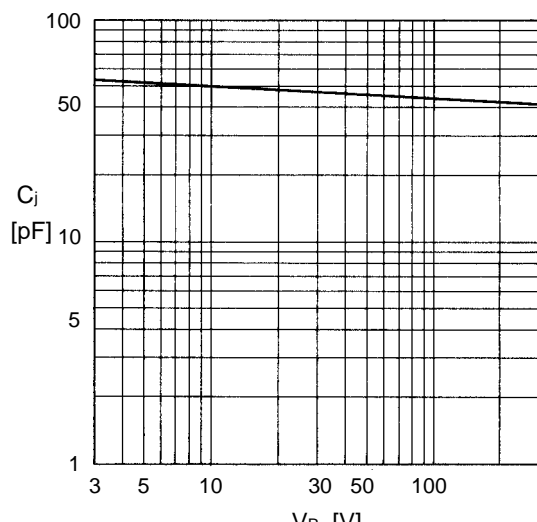
Forward power dissipation



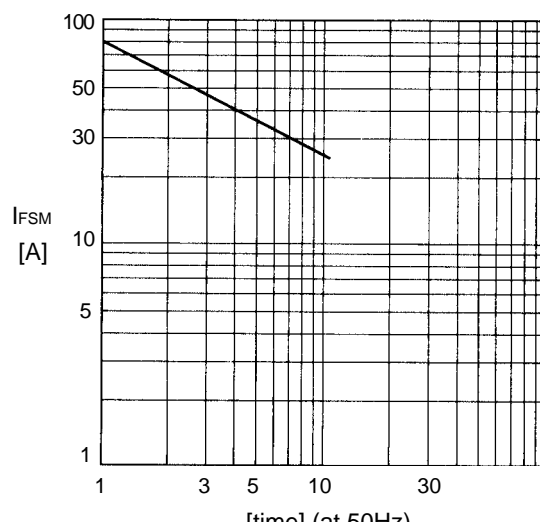
Output current-case temperature



Junction capacitance characteristics



Surge capability



Transient thermal impedance

