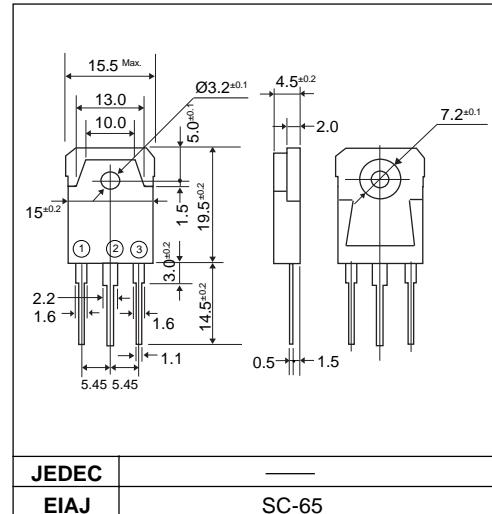


PA905C4 (20A)

(400V / 20A)

LOW LOSS SUPER HIGH SPEED RECTIFIER

■ Outline drawings, mm



| | |
|-------|-------|
| JEDEC | — |
| EIAJ | SC-65 |

■ Features

- 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} | | 400 | V |
| Average output current | I_o | Rectangle wave, duty=1/2, $T_c=92^\circ\text{C}$ | 20* | A |
| Surge current | I_{FSM} | Sine wave 10ms | 80 | A |
| Operating junction temperature | T_j | | -40 to +150 | °C |
| Storage temperature | T_{stg} | | -40 to +150 | °C |

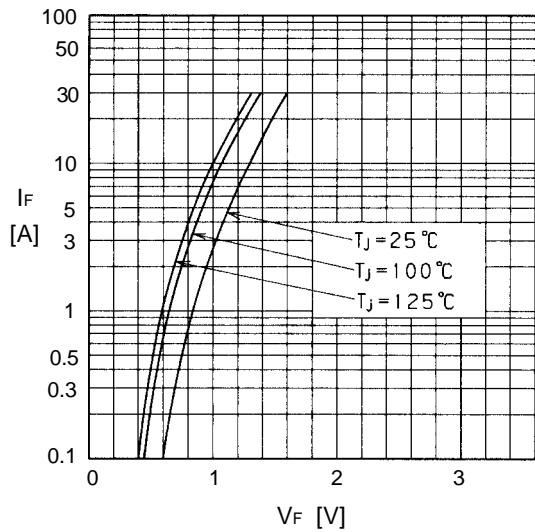
* Average forward current of centertap full wave connection

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

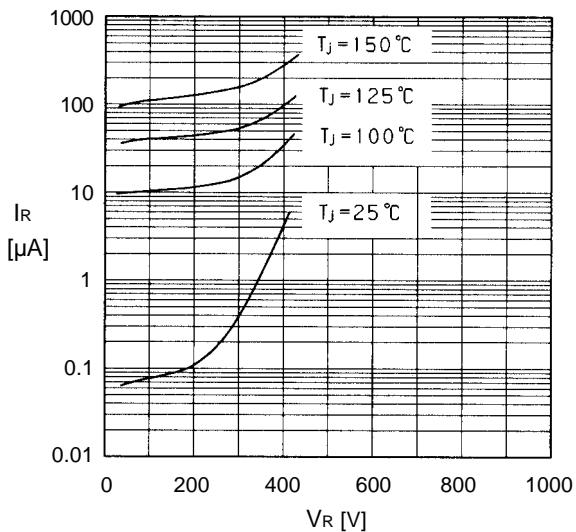
| Item | Symbol | Conditions | Max. | Unit |
|-----------------------|---------------|--|------|---------------|
| Forward voltage drop | V_{FM} | $I_{FM}=10\text{A}$ | 1.5 | V |
| Reverse current | I_{RRM} | $V_R=V_{RRM}$ | 500 | μA |
| Reverse recovery time | t_{rr} | $I_f=0.1\text{A}, I_R=0.2\text{A}, I_{rec}=0.05\text{A}$ | 50 | ns |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case | 1.5* | °C/W |

■ Characteristics

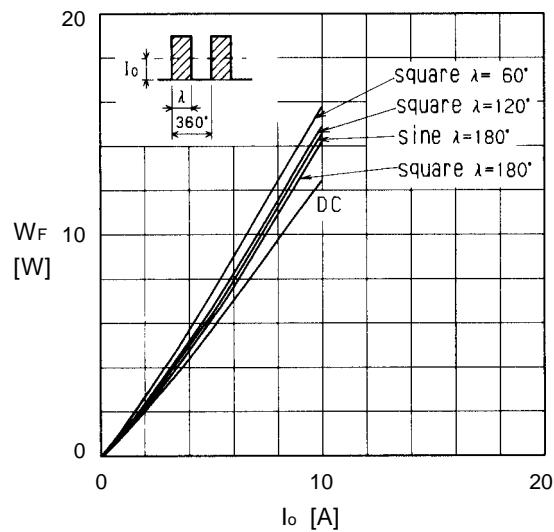
Forward characteristics



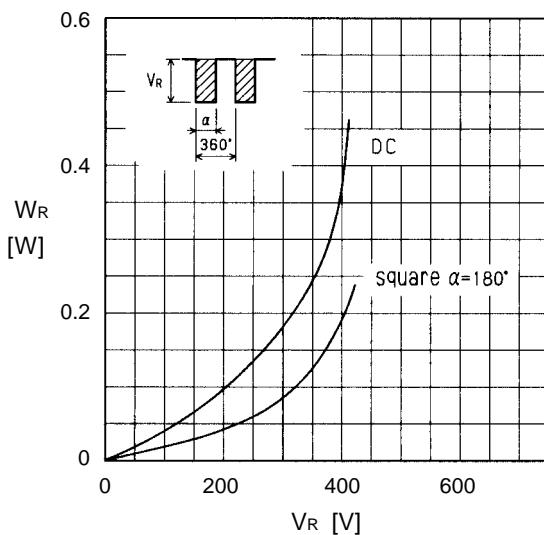
Reverse characteristics



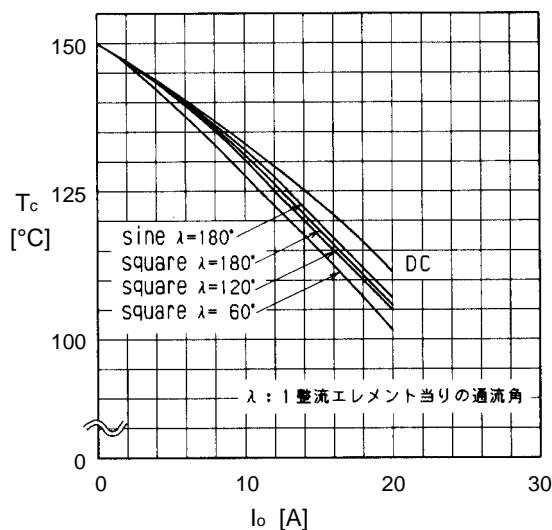
Forward power dissipation



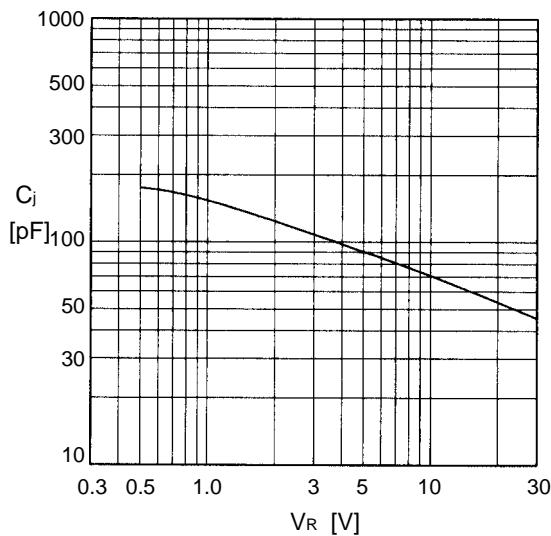
Output current-case temperature



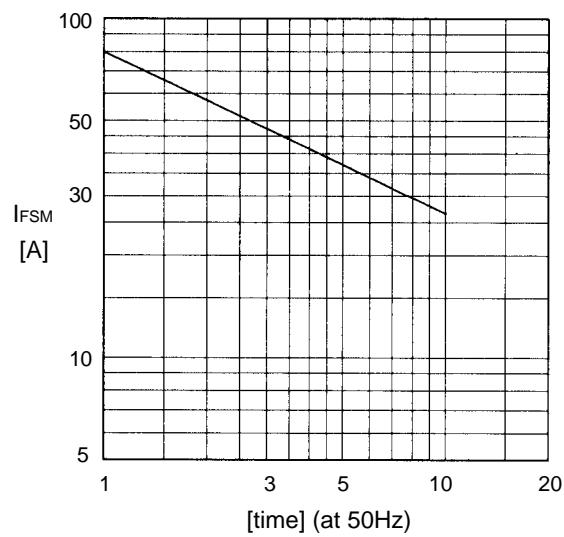
Output current-case temperature



Junction capacitance characteristics



Surge capability



Transient thermal impedance

