

Silicon Standard Recovery Diode

$V_{RRM} = 400\text{ V} - 1600\text{ V}$
 $I_F = 25\text{ A}$

Features

- High Surge Capability
- Types up to 1600 V V_{RRM}
- Equivalent to SKN26 Series
- Not ESD Sensitive

DO-4 Package



Maximum ratings, at $T_j = 25\text{ }^\circ\text{C}$, unless otherwise specified (GKR has leads reversed)

| Parameter | Symbol | Conditions | GKN26/04 | GKN26/08 | GKN26/12 | GKN26/14 | GKN26/16 | Unit |
|--|------------|--|------------|------------|------------|------------|------------|------------------|
| Repetitive peak reverse voltage | V_{RRM} | | 400 | 800 | 1200 | 1400 | 1600 | V |
| DC blocking voltage | V_{DC} | | 400 | 800 | 1200 | 1400 | 1600 | V |
| Continuous forward current | I_F | $T_C \leq 100\text{ }^\circ\text{C}$ | 25 | 25 | 25 | 25 | 25 | A |
| Surge non-repetitive forward current, Half Sine Wave | $I_{F,SM}$ | $T_C = 25\text{ }^\circ\text{C}, t_p = 10\text{ ms}$ | 375 | 375 | 375 | 375 | 375 | A |
| Operating temperature | T_j | | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | $^\circ\text{C}$ |

Electrical characteristics, at $T_j = 25\text{ }^\circ\text{C}$, unless otherwise specified

| Parameter | Symbol | Conditions | GKN26/04 | GKN26/08 | GKN26/12 | GKN26/14 | GKN26/16 | Unit |
|-----------------------|--------|---|----------|----------|----------|----------|----------|------|
| Diode forward voltage | V_F | $I_F = 60\text{ A}, T_j = 25\text{ }^\circ\text{C}$ | 1.55 | 1.55 | 1.55 | 1.55 | 1.55 | V |
| Reverse current | I_R | $V_R = V_{RRM}, T_j = 180\text{ }^\circ\text{C}$ | 4 | 4 | 4 | 4 | 4 | mA |

Thermal characteristics

| Parameter | Symbol | Conditions | GKN26/04 | GKN26/08 | GKN26/12 | GKN26/14 | GKN26/16 | Unit |
|-------------------------------------|------------|------------|----------|----------|----------|----------|----------|------|
| Thermal resistance, junction - case | R_{thJC} | | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | K/W |

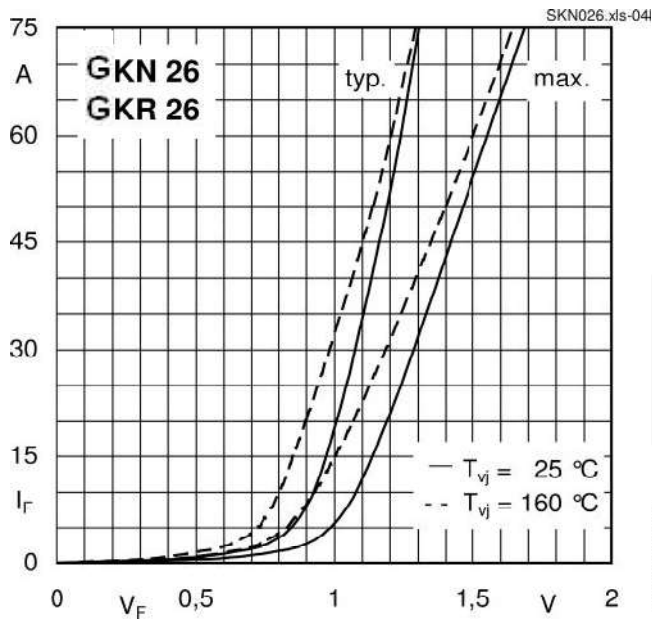


Fig 1: Forward Characteristics

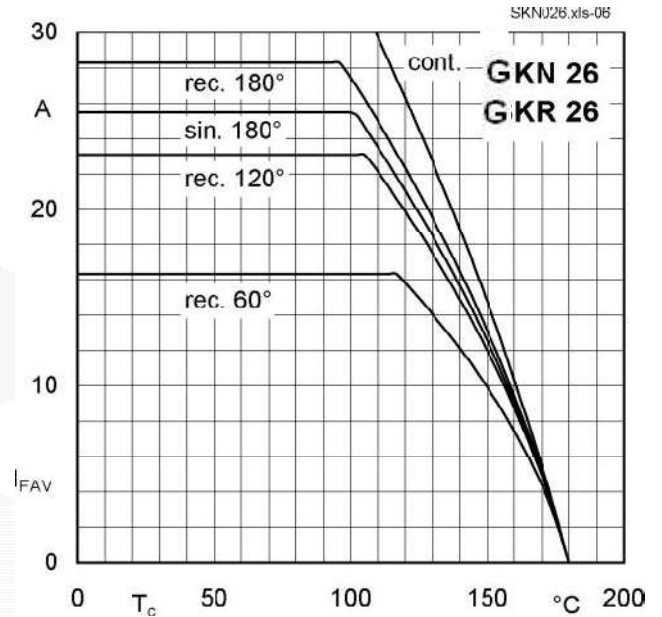


Fig 2: Forward Current vs Case Temp

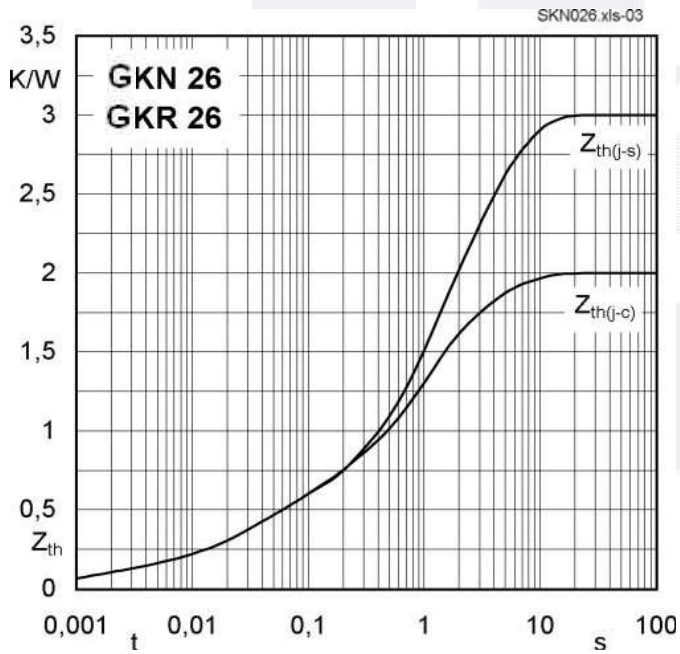


Fig 3: Transient Thermal Impedance vs Time

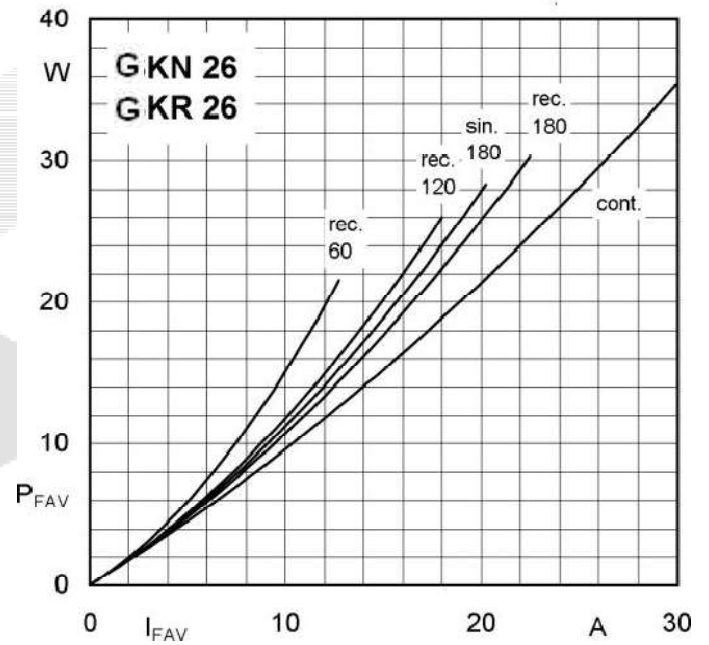
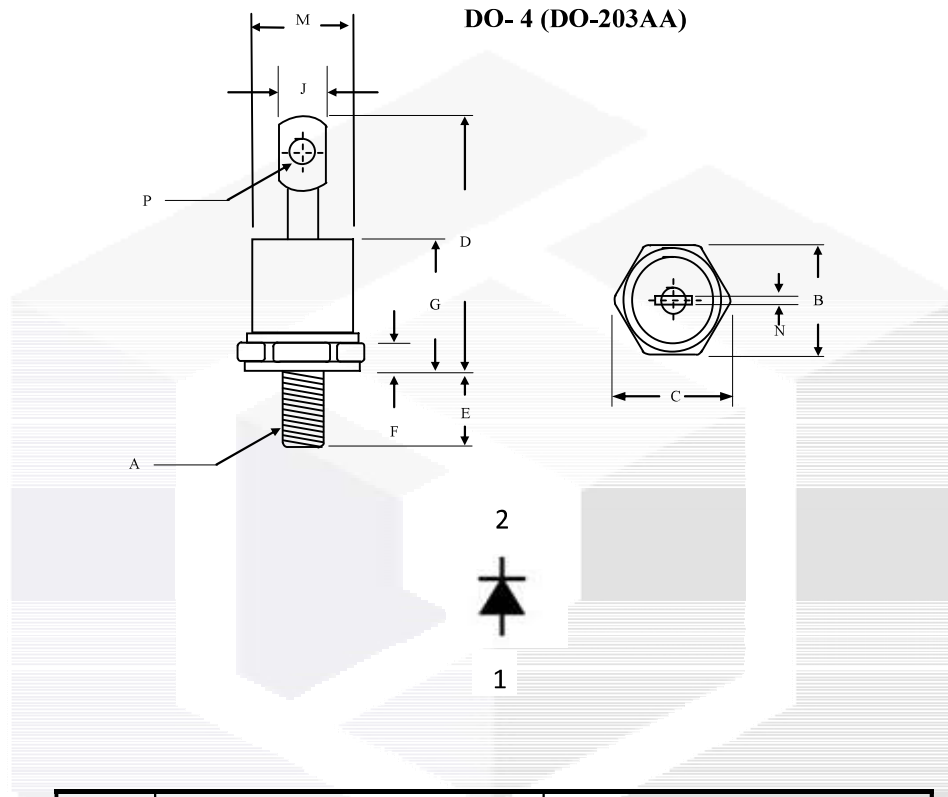


Fig 4: Power Dissipation vs Forward Current

Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



| | Inches | | Millimeters | |
|---|-----------|--------|-------------|-------|
| | Min | Max | Min | Max |
| A | 10-32 UNF | | | |
| B | 0.424 | 0.437 | 10.77 | 11.10 |
| C | ---- | 0.505 | ---- | 12.82 |
| D | ----- | 0.800 | ---- | 20.30 |
| E | 0.453 | 0.492 | 11.50 | 12.50 |
| F | 0.114 | 0.140 | 2.90 | 3.50 |
| G | ---- | 0.405 | ---- | 10.29 |
| J | ---- | 0.216 | ---- | 5.50 |
| M | ---- | φ0.302 | ---- | φ7.68 |
| N | 0.031 | 0.045 | 0.80 | 1.15 |
| P | 0.070 | 0.79 | 1.80 | 2.00 |
| | | | | |