

## 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



GKN

2

1



1



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

|                                     |            |  |      |      |      |      |      |     |
|-------------------------------------|------------|--|------|------|------|------|------|-----|
| Thermal resistance, junction - case | $R_{thJC}$ |  | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | K/W |
|-------------------------------------|------------|--|------|------|------|------|------|-----|

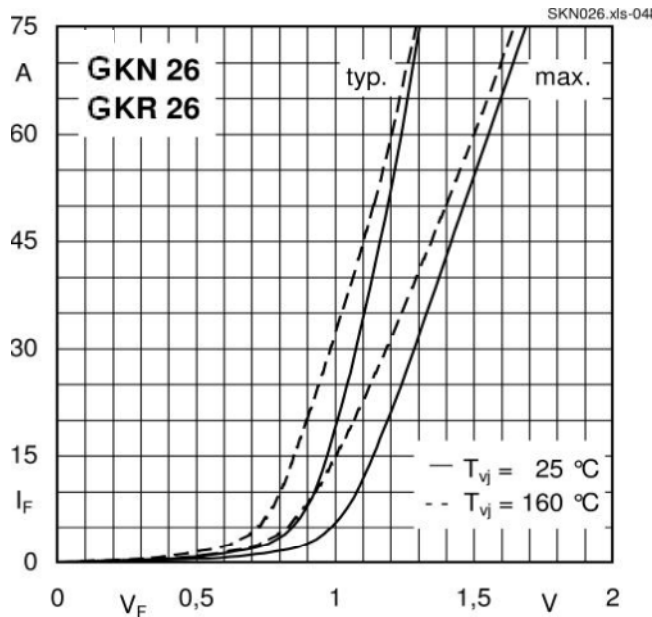


Fig 1: Forward Characteristics

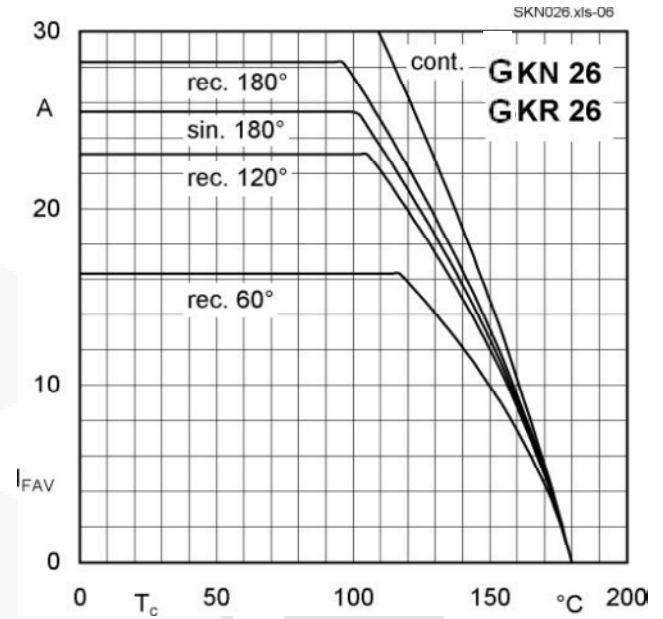


Fig 2: Forward Current vs Case Temp

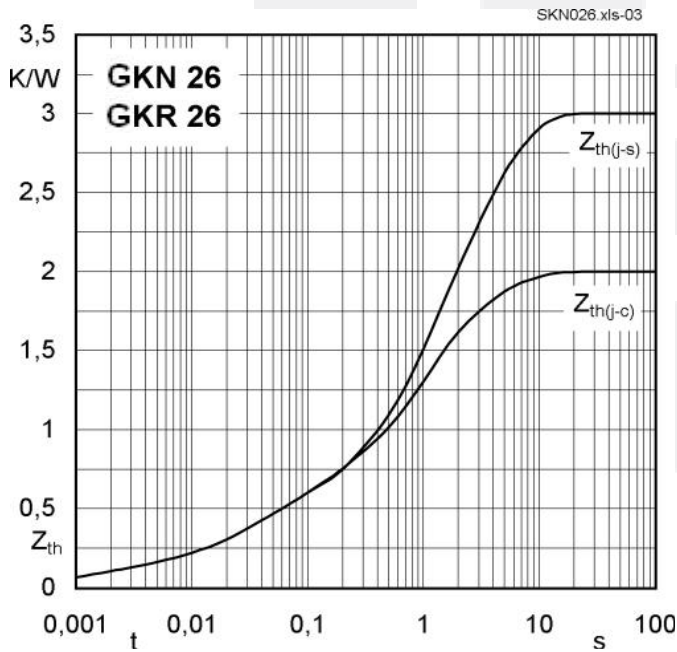


Fig 3: Transient Thermal Impedance vs Time

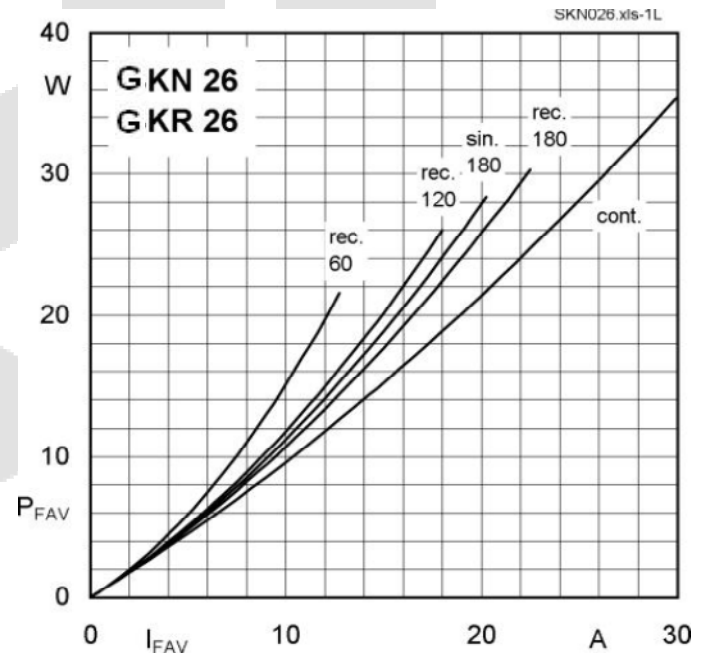
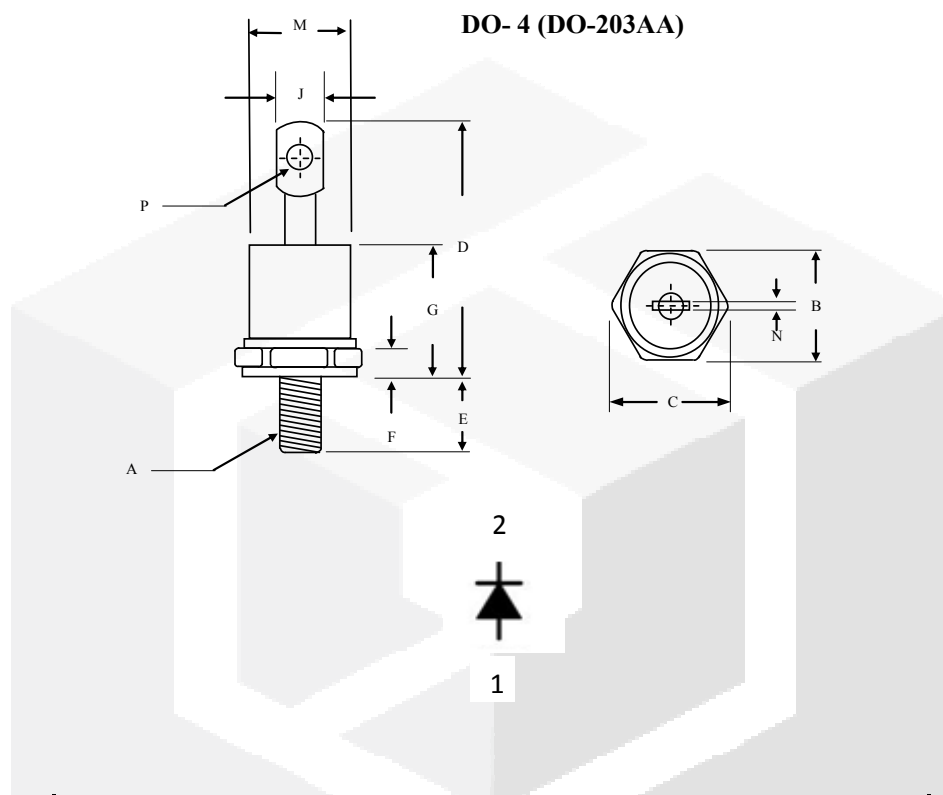


Fig 4: Power Dissipation vs Forward Current

## 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 | -----     | ø0.302 | -----       | ø7.68 |
| N | 0.031     | 0.045  | 0.80        | 1.15  |
| P | 0.070     | 0.79   | 1.80        | 2.00  |
|   |           |        |             |       |