

SCHOTTKY RECTIFIER DIODES 2.6 A AND 30 A
SCHOTTKY GLEICHRICHTERDIODEN 2,6 A UND 30 A

| Type Typ | Maximum ratings ● Grenzdaten | | | | | Characteristic data ● Kenndaten | | | | | Case Gehäuse | |
|-------------|------------------------------|----------------|-----------|----------------|---------------|---------------------------------|-----------|------------------|----------------|-----------|-----------------|-------|
| | I_{FAV} | $I_{FSM}^{3)}$ | U_{RRM} | $U_{RSM}^{3)}$ | ϑ_a | U_F max | at bei | I_F | U_R min | at bei | | I_R |
| | A | A | V | V | °C | V | | A | V | | mA | |
| KYS26/30 | 2,6 ¹⁾ | 120 | 30 | 35 | -40...+125 | 0,6 | | 3 | 30 | | 5 | D58 |
| KYS26/40 | 2,6 ¹⁾ | 120 | 40 | 45 | -40...+125 | 0,6 | | 3 | 40 | | 5 | D58 |
| KYS30/30 | 30 ²⁾ | 400 | 30 | 35 | -55...+125 | 0,6 | | 30 ⁴⁾ | 30 | | 10 | D55/1 |
| KYS30/40 | 30 ²⁾ | 400 | 40 | 45 | -55...+125 | 0,6 | | 30 ⁴⁾ | 40 | | 10 | D55/1 |

1) $R_L = R, L; \theta = 180^\circ, \vartheta_a = 25^\circ C$

2) $R_L = R, L; \theta = 180^\circ, \vartheta_c = 95^\circ C$

3) $t \leq 10$ ms

4) $\vartheta_j = 100^\circ C$

VERY HIGH SPEED RECTIFIER DIODES 25 A
SEHR SCHNELLE GLEICHRICHTERDIODEN 25 A

| Type Typ | Maximum ratings ● Grenzdaten | | | | | | Characteristic data ● Kenndaten | | | | | Case Gehäuse | |
|-------------|------------------------------|-----------|----------------|-----------|-----------|---------------|---------------------------------|-----------|-------|----------------|-----------|-----------------|-------|
| | $I_{FAV}^{1)}$ | I_{FRM} | $I_{FSM}^{2)}$ | U_{RRM} | U_{RSM} | ϑ_a | $U_F^{3)}$ max | at bei | I_F | I_R max | at bei | | U_R |
| | A | A | A | V | V | °C | V | | A | μA | V | ns | |
| KYW31/50 | 25 | 43 | 300 | 50 | 60 | 155 | 0,85 | 20 | 100 | 50 | 100 | 100 | D55 |
| KYW31/100 | 25 | 43 | 300 | 100 | 120 | 155 | 0,85 | 20 | 100 | 100 | 100 | 100 | D55 |
| KYW31/150 | 25 | 43 | 300 | 150 | 180 | 155 | 0,85 | 20 | 100 | 150 | 100 | 100 | D55 |
| KYW77/50 | 25 | 43 | 500 | 50 | 60 | 155 | 0,85 | 20 | 50 | 50 | 60 | 60 | D55/1 |
| KYW77/100 | 25 | 43 | 500 | 100 | 120 | 155 | 0,85 | 20 | 50 | 100 | 60 | 60 | D55/1 |
| KYW77/150 | 25 | 43 | 500 | 150 | 180 | 155 | 0,85 | 20 | 50 | 150 | 60 | 60 | D55/1 |
| KYW77/200 | 25 | 43 | 500 | 200 | 230 | 155 | 0,85 | 20 | 50 | 200 | 60 | 60 | D55/1 |

1) $\vartheta_c = 125^\circ C, \theta = 180^\circ, R_L = R$

2) $t \leq 10$ ms

3) $\vartheta_j = 100^\circ C$

4) $I_F = 1$ A $\rightarrow U_R = 30$ V, $-dI/dt = 50$ A/ μs

DIODES FOR SEMICONDUCTOR DEVICES PROTECTION AGAINST IMPULSE OVERVOLTAGE
DIODEN FÜR HALBLEITERBAUELEMENTE-SCHUTZ GEGEN IMPULS-ÜBERSPANNUNGEN

| Type Typ | Maximum ratings ● Grenzdaten | | | U_{BR} ($I_Z = 1$ mA) | $U_{CL}^{2)}$ max | P_p min. ($t_p = 1$ ms) | $U_{CL} : U_{BR}$ ²⁾ | U_R min. ($I_R = 5 \mu A$) | Case Gehäuse |
|-------------|------------------------------|---------------|-----------|-----------------------------|------------------------|-------------------------------|------------------------------------|-----------------------------------|-----------------|
| | $I_{FSM}^{1)}$ | $I_{FM}^{2)}$ | P_{tot} | | | | | | |
| | A | A | W | V | V | W | max. | V | |
| KZL81/20 | 40 | $400/U_{CL}$ | 1 | 17—22 | $U_{BR} \cdot 1,35$ | 400 | 1,35 | 16 | D26 |
| KZL81/40 | 40 | $400/U_{CL}$ | 1 | 34—45 | $U_{BR} \cdot 1,35$ | 400 | 1,35 | 32 | D26 |
| KZL81/145 | 40 | $400/U_{CL}$ | 1 | 120—170 | $U_{BR} \cdot 1,45$ | 400 | 1,45 | 105 | D26 |

1) $t \leq 10$ ms

2) $P_p = 400$ W, $t_p = 1$ ms; $\vartheta_a = 25^\circ C$

For all types valid ● Für alle Typen gilt:

$U_F \leq 1,1$ V at ● bei $I_F = 1$ A, $\vartheta_a = 25^\circ C$

Duty cycle of repetitive impulse in reverse direction ● Impulspausenverhältnis in Sperr-Richtung:

$\leq 1 \cdot 10^{-4}$ at ● bei $P_p = 400$ W

$\vartheta_{j\ max.} = 155^\circ C, \vartheta_{a\ min.-max.} = -55^\circ C \dots +155^\circ C$