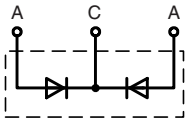
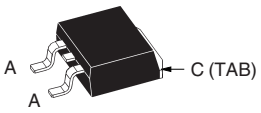
# Power Schottky Rectifier
## with common cathode

$I_{FAV}$ = 15 A
$V_{RRM}$ = 100 V
$V_F$ = 0.64 V

| $V_{RSM}$ V | $V_{RRM}$ V | Type |
|---|---|---|
| 100 | 100 | DSSK 28-01AS |




**TO-263 AB**




A = Anode, C = Cathode , TAB = Cathode

| Symbol | Conditions | Maximum Ratings | |
|---|---|---|---|
| $I_{FRMS}$ | | 35 | A |
| $I_{FAV}$ | $T_C$ = 160°C; rectangular, d = 0.5 | 2x15 | A |
| $I_{FSM}$ | $T_{VJ}$ = 45°C; $t_p$ = 10 ms (50 Hz), sinev | 230 | A |
| $E_{AS}$ | $I_{AS}$ = 10 A; L = 100 µH; $T_{VJ}$ = 25°C; non repetitive | 5 | mJ |
| $I_{AR}$ | $V_A$ =1.5 • $V_{RRM}$ typ.; f=10 kHz; repetitive | 1 | A |
| $(dv/dt)_{cr}$ | | 5000 | V/µs |
| $T_{VJ}$ | | -55...+175 | °C |
| $T_{VJM}$ | | 175 | °C |
| $T_{stg}$ | | -55...+150 | °C |
| $P_{tot}$ | $T_C$ = 25°C | 105 | W |
| $F_C$ | mounting force | 20...60 | N |
| Weight | typical | 2 | g |

| Symbol | Conditions | Characteristic Values typ. | max. | |
|---|---|---|---|---|
| $I_R$ ① | $V_R$ = $V_{RRM}$; $T_{VJ}$ = 25°C | | 0.5 | mA |
| | $V_R$ = $V_{RRM}$; $T_{VJ}$ = 125°C | | 5 | mA |
| $V_F$ | $I_F$ = 15 A; $T_{VJ}$ = 125°C | | 0.64 | V |
| | $I_F$ = 15 A; $T_{VJ}$ = 25°C | | 0.82 | V |
| | $I_F$ = 30 A; $T_{VJ}$ = 125°C | | 0.78 | V |
| $R_{thJC}$ | | | 1.4 | K/W |

Pulse test: Pulse Width = 5 ms, Duty Cycle < 2.0 %
Data according to IEC 60747 and per diode unless otherwise specified

### Features
- International standard package
- Very low $V_F$
- Extremely low switching losses
- Low $I_{RM}$-values
- Epoxy meets UL 94V-0

### Applications
- Rectifiers in switch mode power supplies (SMPS)
- Free wheeling diode in low voltage converters

### Advantages
- High reliability circuit operation
- Low voltage peaks for reduced protection circuits
- Low noise switching
- Low losses

**Dimensions see Outlines.pdf**

IXYS reserves the right to change limits, conditions and dimensions.

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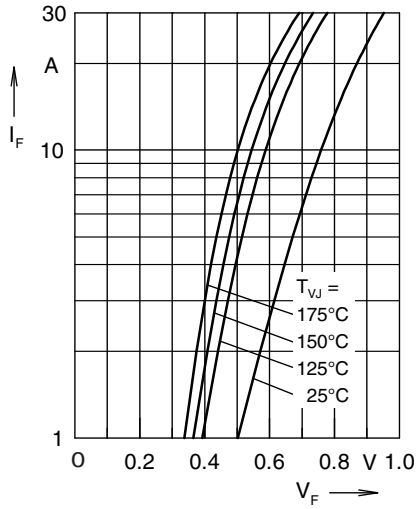


Fig. 1 Max. forward voltage drop characteristics

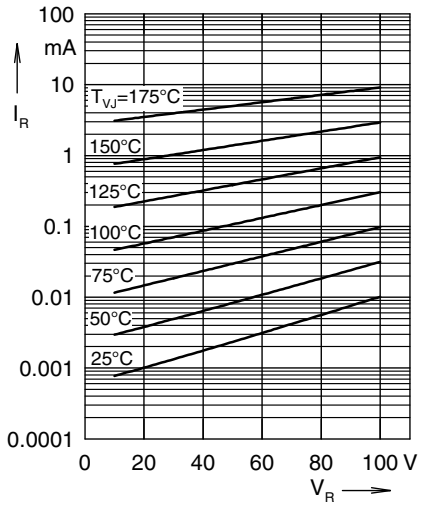


Fig. 2 Typ. reverse current $I_R$ vs. reverse voltage $V_R$

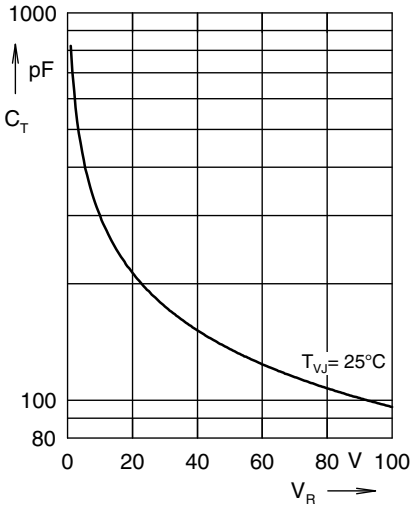


Fig. 3 Typ. junction capacitance $C_T$ versus reverse voltage $V_R$

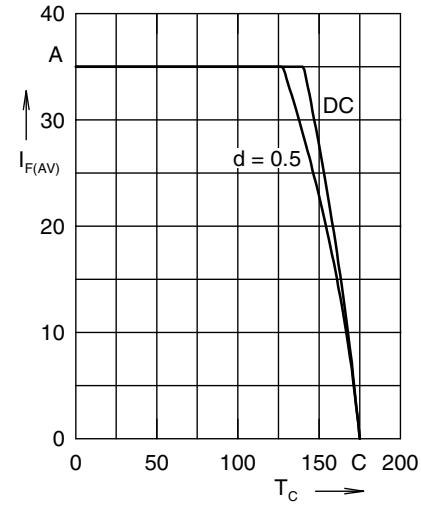


Fig. 4 Avg. forward current $I_{F(AV)}$ vs. case temperature $T_C$

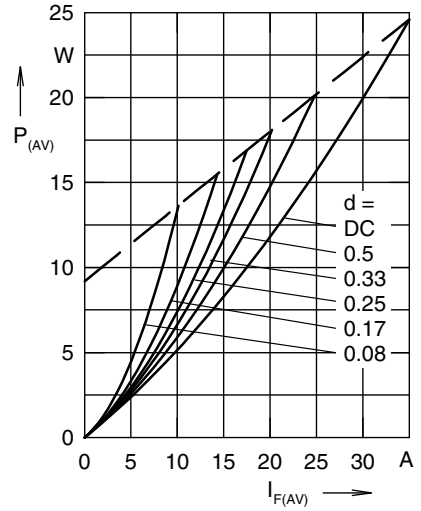


Fig. 5 Forward power loss characteristics

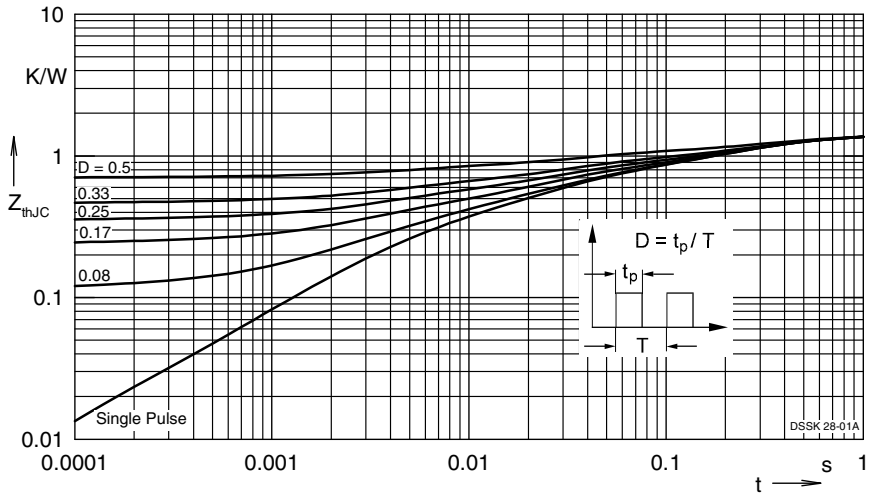


Fig. 6 Transient thermal impedance junction to case at various duty cycles

Note: All curves are per diode

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