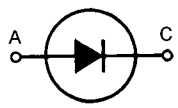
# Power Schottky Rectifier DSS 60

$I_{FAV}$ = 60 A
$V_{RRM}$ = 35 - 45 V

| $V_{RSM}$ V | $V_{RRM}$ V | Type |
|---|---|---|
| 35 | 35 | DSS 60-0035B |
| 45 | 45 | DSS 60-0045B |

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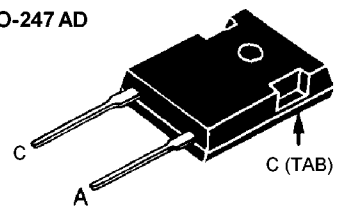



| Symbol | Test Conditions | Maximum Ratings (per diode) | |
|---|---|---|---|
| $I_{FRMS}$ | $T_{VJ} = T_{VJM}$ | 70 | A |
| $I_{FAV}$ | $T_C$ = 120°C; rectangular, d = 0.5 | 60 | A |
| $I_{FSM}$ | $t_p$ = 10 ms (50 Hz), sine | 900 | A |
| $E_{AS}$ | $I_{AS}$ = 20 A; L = 180 µH; $T_{VJ}$ = 25°C; non repetitive | 57 | mJ |
| $I_{AR}$ | $V_A$ =1.5 x $V_{RRM}$; f=10 kHz; repetitive | 2 | A |
| $(dv/dt)_{cr}$ | | 1000 | V/µs |
| $T_{VJ}$ | | -55...+175 | °C |
| $T_{VJM}$ | | 175 | °C |
| $T_{stg}$ | | -55...+150 | °C |
| $P_{tot}$ | $T_C$ = 25°C | 155 | W |
| $M_d$ | Mounting torque with screw M3 | 0.45/4 | Nm/lb.in. |
| | Mounting torque with screw M3.5 | 0.55/5 | Nm/lb.in. |
| Weight | | 6 | g |

| Symbol | Test Conditions | Characteristic Values (per diode) typ. | max. | |
|---|---|---|---|---|
| $I_R$ ① | $T_{VJ}$ = 25°C $V_R = V_{RRM}$ | | 10 | mA |
| | $T_{VJ}$ = 125°C $V_R = V_{RRM}$ | | 250 | mA |
| $V_F$ | $I_F$ = 60 A; $T_{VJ}$ = 125°C | | 0.57 | V |
| | $I_F$ = 60 A; $T_{VJ}$ = 25°C | | 0.60 | V |
| | $I_F$ = 120 A; $T_{VJ}$ = 125°C | | 0.93 | V |
| $R_{thJC}$ | | | 0.8 | K/W |
| $R_{thCH}$ | | 0.25 | | K/W |

Pulse test: ① Pulse Width = 5 ms, Duty Cycle < 2.0 %
Data according to IEC 60747

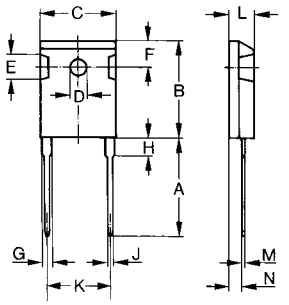
IXYS reserves the right to change limits, test conditions and dimensions.

### Features
- International standard package
- Very low $V_F$
- Extremely low switching losses
- Low $I_{RM}$-values

### 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




| Dim. | Millimeter Min. | Max. | Inches Min. | Max. |
|---|---|---|---|---|
| A | 19.81 | 20.32 | 0.780 | 0.800 |
| B | 20.80 | 21.46 | 0.819 | 0.845 |
| C | 15.75 | 16.26 | 0.610 | 0.640 |
| D | 3.55 | 3.65 | 0.140 | 0.144 |
| E | 4.32 | 5.49 | 0.170 | 0.216 |
| F | 5.4 | 6.2 | 0.212 | 0.244 |
| G | 1.65 | 2.13 | 0.065 | 0.084 |
| H | - | 4.5 | - | 0.177 |
| J | 1.0 | 1.4 | 0.040 | 0.055 |
| K | 10.8 | 11.0 | 0.426 | 0.433 |
| L | 4.7 | 5.3 | 0.185 | 0.209 |
| M | 0.4 | 0.8 | 0.016 | 0.031 |
| N | 1.5 | 2.49 | 0.087 | 0.102 |

(4/98)