



DSS 2x81-0035/45B

Power Schottky Rectifier

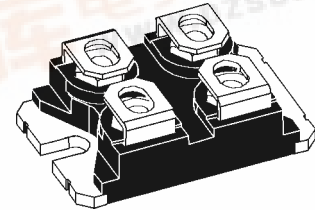
$I_{FAV} = 2x80 A$
 $V_{RRM} = 35 - 45 V$
 $V_F = 0.64 V$

Preliminary Data

V_{RSM} V	V_{RRM} V	Type
35	35	DSS 2x81-0035B
45	45	DSS 2x81-0045B



miniBLOC, SOT-227 B



Symbol	Test Conditions	Maximum Ratings	
I_{FRMS}		100	A
I_{FAVM}	$T_C = 75^\circ C$; rectangular, $d = 0.5$	80	A
I_{FAVM}	$T_C = 75^\circ C$; rectangular, $d = 0.5$; per device	160	A
I_{FSM}	$T_{VJ} = 45^\circ C$; $t_p = 10$ ms (50 Hz), sine	900	A
E_{AS}	$I_{AS} = 20$ A; $L = 180$ μH ; $T_{VJ} = 25^\circ C$; non repetitive	57	mJ
I_{AR}	$V_A = 1.5 \cdot V_{RRM}$ typ.; $f = 10$ kHz; repetitive	2	A
$(dv/dt)_{cr}$		1000	V/ μs
T_{VJ}		-40...+150	$^\circ C$
T_{VJM}		150	$^\circ C$
T_{stg}		-40...+150	$^\circ C$
P_{tot}	$T_C = 25^\circ C$	150	W
V_{ISOL}	50/60 Hz, RMS $I_{ISOL} \leq 1$ mA	2500	V~
M_d	mounting torque (M4) terminal connection torque (M4)	1.1-1.5/9-13	Nm/lb.in.
Weight	typical	30	g

Features

- International standard package miniBLOC
- Isolation voltage 2500 V~
- UL registered E 72873
- 2 independent Schottky diodes in 1 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 see page 84

Symbol	Test Conditions	Characteristic Values	
		typ.	max.
I_R ①	$T_{VJ} = 25^\circ C$ $V_R = V_{RRM}$ $T_{VJ} = 100^\circ C$ $V_R = V_{RRM}$		10 mA 250 mA
V_F	$I_F = 80$ A; $T_{VJ} = 125^\circ C$ $I_F = 80$ A; $T_{VJ} = 25^\circ C$ $I_F = 160$ A; $T_{VJ} = 125^\circ C$		0.64 V 0.66 V 1.07 V
R_{thJC} R_{thCH}		0.1	0.8 K/W K/W

Pulse test: ① Pulse Width = 5 ms, Duty Cycle < 2.0 %
 Data according to IEC 60747 and per diode unless otherwise specified

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

