

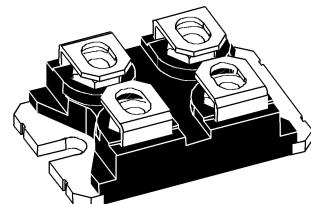
Power Schottky Rectifier

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

V _{RSM} V	V _{RRM} V	Type
45	45	DSS 2x81-0045B



miniBLOC, SOT-227 B



Symbol	Conditions	Maximum Ratings		
I _{FRMS}		100	A	
I _{FAVM}	T _C = 75°C; rectangular, d = 0.5	80	A	
I _{FAVM}	T _C = 75°C; rectangular, d = 0.5; per device	160	A	
I _{FSM}	T _{VJ} = 45°C; t _p = 10 ms (50 Hz), sine	800	A	
E _{AS}	I _{AS} = 20 A; L = 180 µH; T _{VJ} = 25°C; non repetitive	57	mJ	
I _{AR}	V _A = 1.5 • V _{RRM} typ.; f=10 kHz; repetitive	2	A	
(dV/dt) _{cr}		1000	V/µs	
T _{VJ}		-40...+150	°C	
T _{VJM}		150	°C	
T _{stg}		-40...+150	°C	
P _{tot}	T _C = 25°C	150	W	
V _{ISOL}	50/60 Hz, RMS I _{ISOL} ≤ 1 mA	2500	V~	
M _d	mounting torque (M4) terminal connection torque (M4)	1.1-1.5/9-13 1.1-1.5/9-13	Nm/lb.in. Nm/lb.in.	
Weight	typical	30	g	

Symbol	Conditions	Characteristic Values	
		typ.	max.
I _R ①	T _{VJ} = 25°C V _R = V _{RRM} T _{VJ} = 100°C V _R = V _{RRM}	60 250	mA mA
V _F	I _F = 80 A; T _{VJ} = 125°C I _F = 80 A; T _{VJ} = 25°C I _F = 160 A; T _{VJ} = 125°C	0.64 0.66 1.07	V V V
R _{thJC} R _{thCH}		0.1	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, Conditions and dimensions.

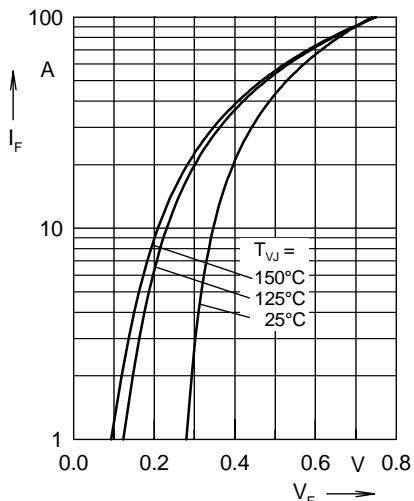


Fig. 1 Maximum forward voltage drop characteristics

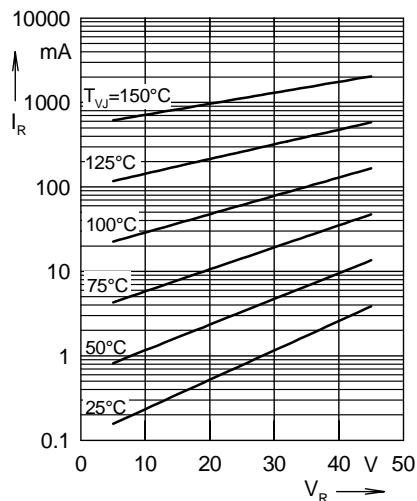


Fig. 2 Typ. value of reverse current I_R versus reverse voltage V_R

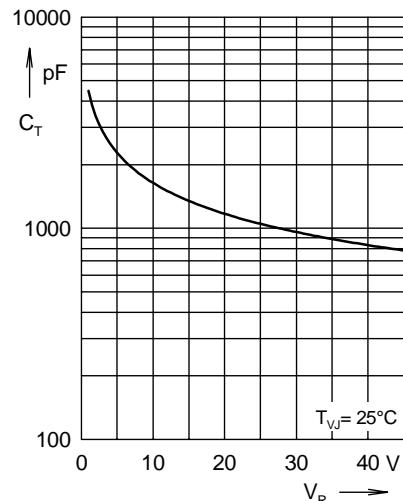


Fig. 3 Typ. junction capacitance C_T versus reverse voltage V_R

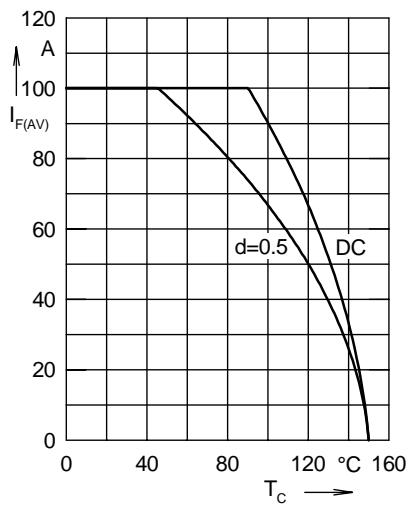


Fig. 4 Average forward current $I_{F(AV)}$ versus case temperature T_C

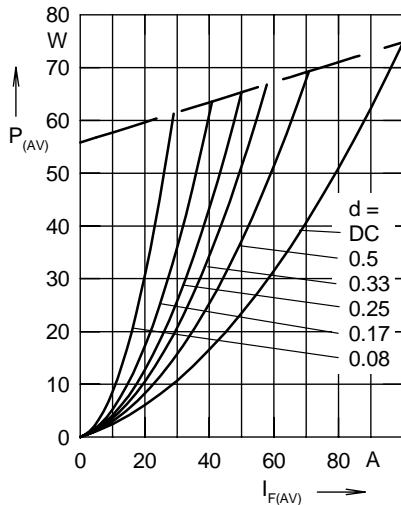


Fig. 5 Forward power loss characteristics

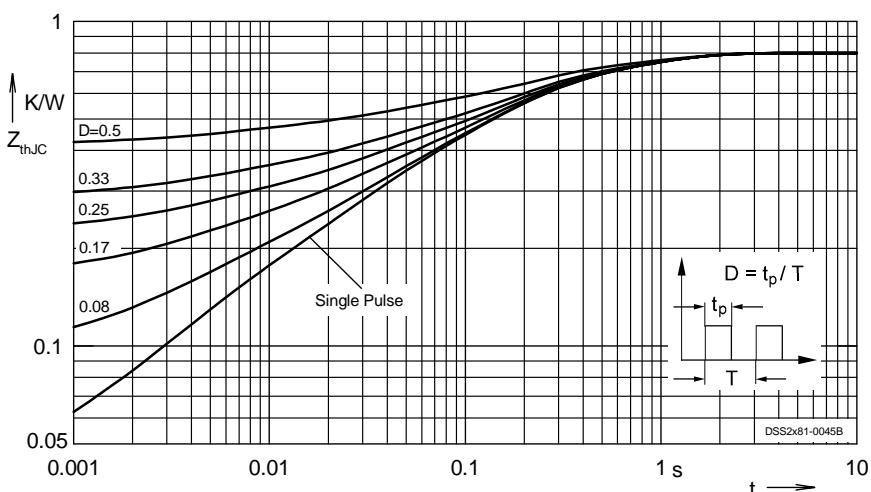


Fig. 6 Transient thermal impedance junction to case at various duty cycles

Note: All curves are per diode