

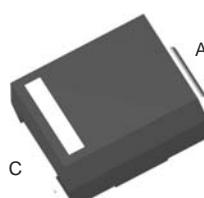
Power Schottky Rectifier

I_{FAV} = 2 A
V_{RRM} = 40 V
V_F = 0.33 V

V _{RSM}	V _{RRM}	Type	Marking
V	V	on product	
40	40	DSS 2-40BB	X2EBB



SMB (DO-214 AA)



Symbol	Conditions	Maximum Ratings	
I _{FAV}	T _L = 125°C; rectangular, d = 0.5	2	A
I _{FAVM}	rectangular, d = 0.5	4	A
I _{FSM}	T _{VJ} = 45°C; t _p = 10 ms (50 Hz), sine	110	A
E _{AS}	I _{AS} = tbd A; L = 100 µH; T _{VJ} = 25°C; non repetitive	tbd	mJ
I _{AR}	V _A = 1.5 • V _{RRM} typ.; f=10 kHz; repetitive	tbd	A
(dv/dt) _{cr}		10000	V/µs
T _{VJ} *		-55...+150	°C
T _{VJM}		150	°C
T _{stg}		-55...+150	°C
Weight	typical	0.1	g
Package unit	tape & reel	3000	pcs

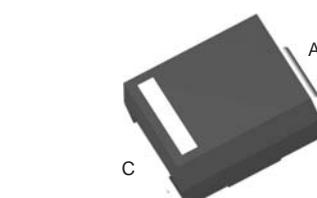
Symbol	Conditions	Characteristic Values	
		typ.	max.
I _R	T _{VJ} = 25°C; V _R = V _{RRM} T _{VJ} = 125°C; V _R = V _{RRM}	0.5 25	mA mA
V _F ①	I _F = 2 A; T _{VJ} = 25°C I _F = 4 A; T _{VJ} = 25°C I _F = 2 A; T _{VJ} = 125°C I _F = 4 A; T _{VJ} = 125°C	0.42 0.5 0.33 0.42	V V V V
R _{thJL}	thermal resistance junction to lead mounted on 1 inch square PCB	15	K/W
R _{thJA}	thermal resistance junction - ambient	60	K/W
C _T	typ. junction capacitance	230	pF

* $\frac{dP_{tot}}{dT_J} < \frac{1}{R_{th(J-A)}}$ thermal runaway condition for a diode on its own heatsink

Pulse test: ① Pulse Width = 400 µs, 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.

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Applications

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

Advantages

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

Dimensions in mm

