

Vishay General Semiconductor

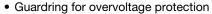
High Current Density Surface Mount Schottky Rectifier



DO-214AA (SMB)

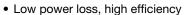
PRIMARY CHARACTERISTICS				
I _{F(AV)}	3.0 A			
V_{RRM}	40 V			
I _{FSM}	100 A			
V _F at I _F = 3.0 A	0.34 V			
T _J max.	150 °C			

FEATURES









Very low forward voltage drop

· High surge capability

 Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

 Material categorization: For definitions of compliance please see www.vishav.com/doc?99912

TYPICAL APPLICATIONS

For use in low voltage, high frequency inverters, freewheeling, DC/DC converters, and polarity protection application.

MECHANICAL DATA

Case: DO-214AA

Molding compound meets UL 94V-0 flammability rating Base P/N-E3 - RoHS-compliant, commercial grade

Terminals: Matte tin plated leads, solderable per

J-STD-002 and JESD 22-B102

E3 suffix meets JESD 201 class 1A whisker test **Polarity:** Color band denotes cathode end

MAXIMUM RATINGS (T _A = 25 °C unless otherwise noted)				
PARAMETER	SYMBOL	B340LB	UNIT	
Device marking code		B34		
Maximum repetitive peak reverse voltage	V_{RRM}	40		
Maximum RMS voltage	V _{RMS}	28	V	
Maximum DC blocking voltage	V _{DC}	40		
Maximum average forward rectified current at T _L (Fig.1)	I _{F(AV)}	3.0	Α	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	100		
Voltage rate of change (rated V _R)	dV/dt	10 000	V/µs	
Operating junction and storage temperature range	T _J , T _{STG}	- 65 to + 150	°C	



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ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)							
PARAMETER	SYMBOL	TEST CONDITIONS		TYP.	MAX.	UNIT	
Maximum instantaneous forward voltage	V _F ⁽¹⁾	3.0 A	T _J = 25 °C	0.43	0.45	- V	
			T _J = 125 °C	0.34	0.38		
Maximum reverse current at	I _R ⁽²⁾	Rated V _R	T _J = 25 °C	=	0.4	- mA	
			T _J = 125 °C	26	40		

Note

(1) Pulse test: 300 µs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)					
PARAMETER	SYMBOL B340LB		UNIT		
Typical thermal resistance	$R_{ hetaJA}$	70	°C/W		
	$R_{ hetaJL}$	25	O/W		

ORDERING INFORMATION (Example)						
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE	
DO-214AA (SMB)	B340LB-E3/52T	0.096	52T	750	7" diameter tape and reel	
DO-214AA (SMB)	B340LB-E3/5BT	0.096	5BT	3200	13" diameter tape and reel	

RATINGS AND CHARACTERISTICS CURVES

(T_A = 25 °C unless otherwise noted)

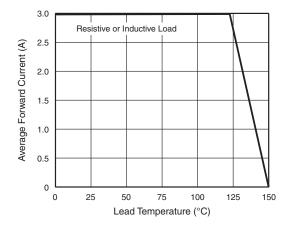


Fig. 1 - Forward Current Derating Curve

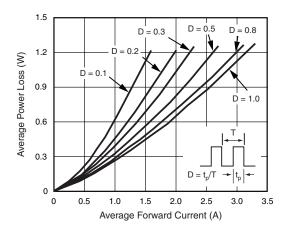


Fig. 2 - Forwrd Power Loss Characteristics



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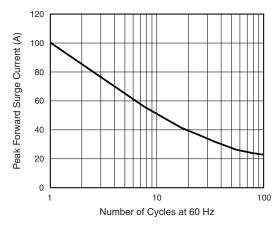


Fig. 3 - Maximum Non-Repetitive Peak Forward Surge Current

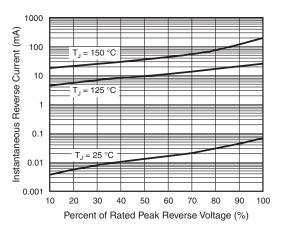


Fig. 5 - Typical Reverse Characteristics

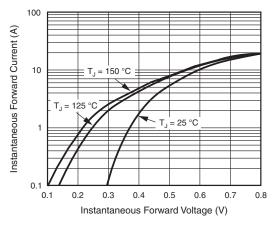


Fig. 4 - Typical Instantaneous Forward Characteristics

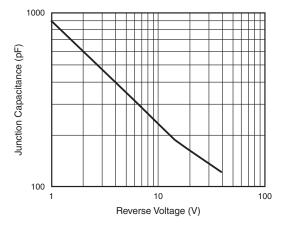
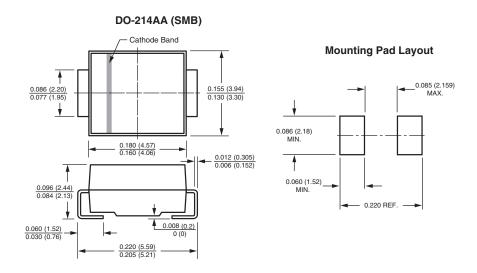


Fig. 6 - Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина,

дом 2, корпус 4, литера А.