

SS32-B THRU SS320-B

3.0A Surface Mount Schottky Barrier Rectifiers - 20V-200V

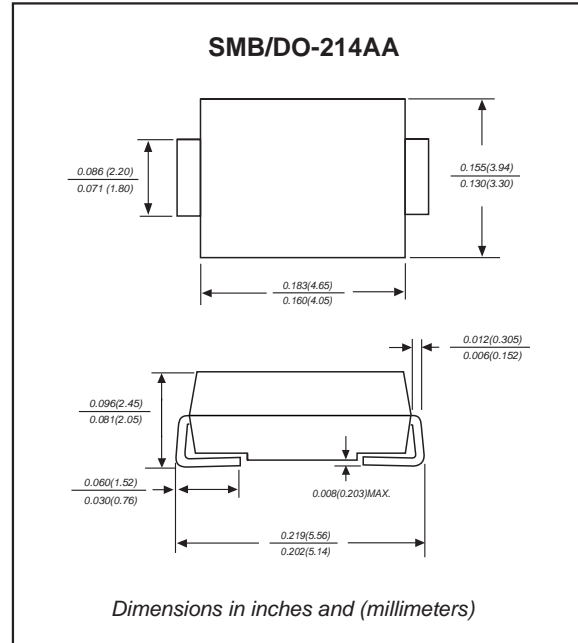
Features

- ▶ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ▶ For surface mounted applications
- ▶ Metal silicon junction, majority carrier conduction
- ▶ Low power loss, high efficiency
- ▶ Built-in strain relief, ideal for automated placement
- ▶ High forward surge current capability
- ▶ High temperature soldering guaranteed: 250°C/10 seconds at terminals
- ▶ Compliant to RoHS Directive 2011/65/EU
- ▶ Suffix "-H" indicates Halogen-free part, ex. SS34-B-H

Mechanical data

- ▶ **Case:** JEDEC DO-214AA molded plastic body
- ▶ **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- ▶ **Polarity:** Color band denotes cathode end
- ▶ **Mounting Position:** Any
- ▶ **Weight:** 0.003 ounce, 0.093 grams

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I_O			3.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			80	A
Reverse current	$V_R = V_{RRM} \quad T_A = 25^\circ\text{C}$	I_R			0.5	mA
	$V_R = V_{RRM} \quad T_A = 100^\circ\text{C}$				10	
Thermal resistance	Junction to ambient NOTE 1	$R_{\theta JA}$		55		$^\circ\text{C/W}$
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		500		pF
Storage temperature		T_{STG}	-65		+150	$^\circ\text{C}$

Note: 1.P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature T_J ($^\circ\text{C}$)
SS32-B	20	14	20	0.55	-55 to +125
SS34-B	40	28	40		
SS345-B	45	32	45		
SS35-B	50	35	50	0.70	-55 to +150
SS36-B	60	42	60		
SS38-B	80	56	80	0.85	
SS310-B	100	70	100		
SS315-B	150	105	150	0.92	
SS320-B	200	140	200		

*1 Repetitive peak reverse voltage

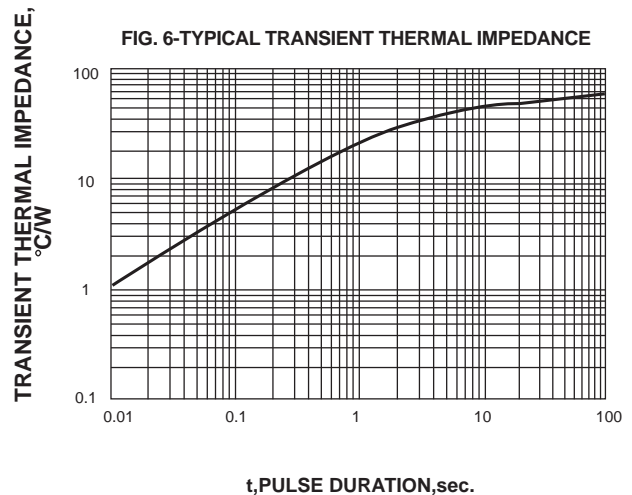
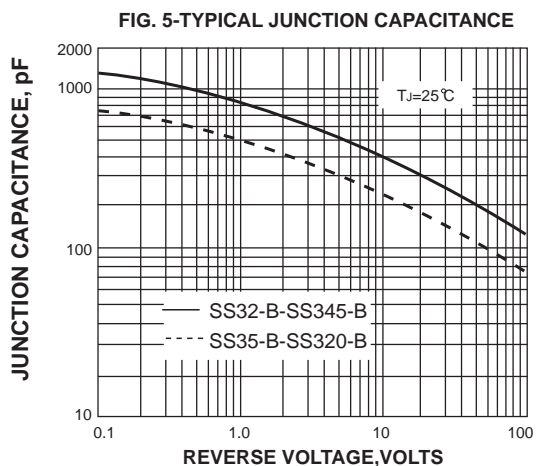
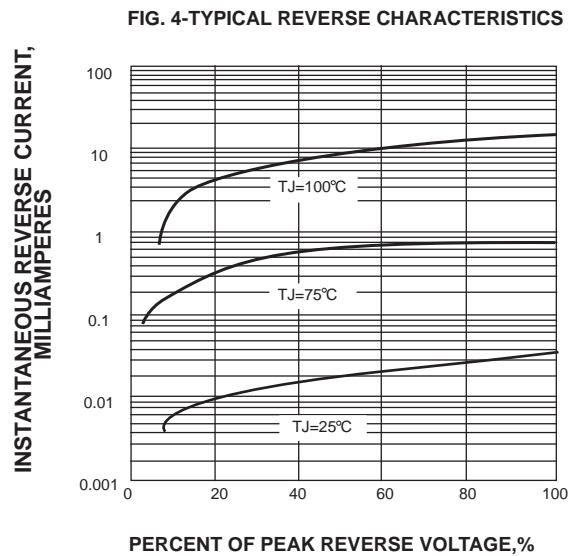
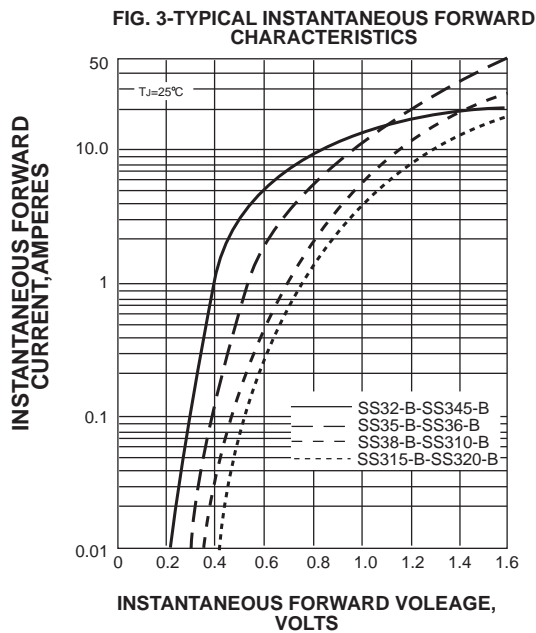
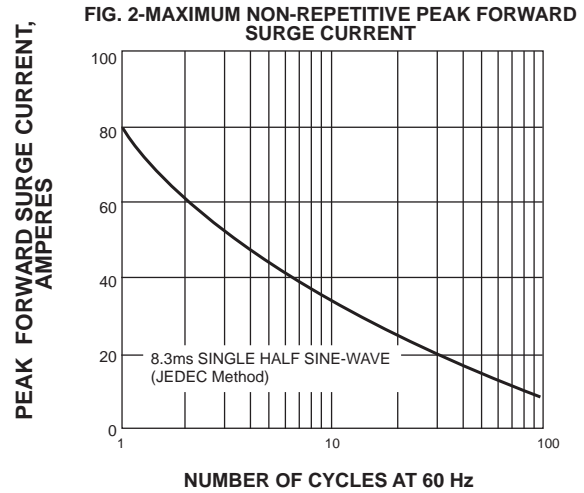
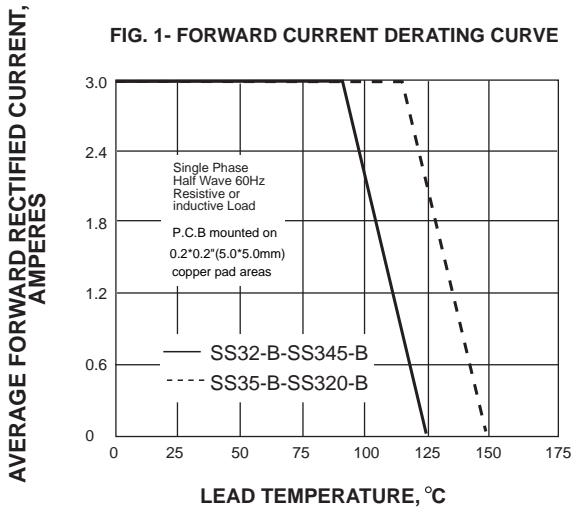
*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage@ $I_F=3.0\text{A}$



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Rating and characteristic curves

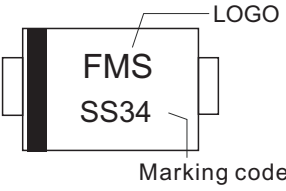
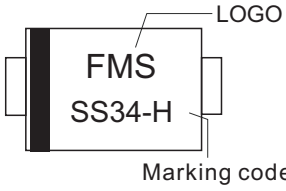


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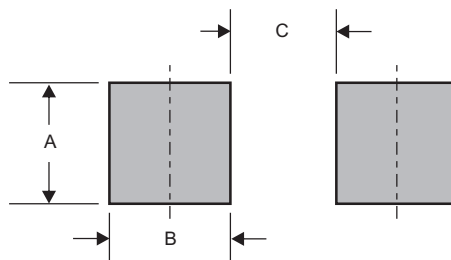
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code	Example	
SS32-B	SS32	For Halogen Device	For Halogen-free Device
SS34-B	SS34		
SS345-B	SS345		
SS35-B	SS35		
SS36-B	SS36		
SS38-B	SS38		
SS310-B	SS310		
SS315-B	SS315		
SS320-B	SS320		

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMB	0.078 (2.00)	0.059 (1.50)	0.110 (2.80)