FSV340FP, FSV360FP

Surface Mount Schottky Barrier Rectifier

Features

- Low Forward Voltage Drop:
 - FSV340FP: 0.52 V Maximum at 3 A, $T_A = 25^{\circ}C$
 - FSV360FP: 0.65 V Maximum at 3 A, $T_A = 25^{\circ}C$
- Larger Cathode Pad for Improved Power Dissipation
- Ultra Thin Profile Maximum Height of 1.0 mm
- High Surge Capacity
- UL Flammability 94V-0 Classification
- MSL 1
- Green Mold Compound
- These Devices are Pb–Free, Halogen Free Free and are RoHS Compliant

Specifications

		Value		
Symbol	Parameter	FSV340FP	FSV360FP	Unit
V _{RRM}	Recurrent Peak Reverse Voltage	40	60	V
V _{RMS}	RMS Reverse Voltage	28	42	V
V _R	DC Blocking Voltage	40	60	V
I _{F(AV)}	Average Forward Current at $T_L = 75^{\circ}C$	3		A
I _{FSM}	Peak Forward Surge Current: 8.3 ms Single Half Sine–Wave Superimposed on Rated Load (JEDEC Method)	80		A
ТJ	Operating Junction Temperature Range	–55 to +150		°C
T _{STG}	Storage Temperature Range	-55 to +150		°C

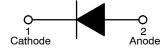
ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.



ON Semiconductor®

www.onsemi.com

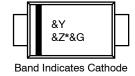


Schottky Barrier Rectifier



CASE 425AC

MARKING DIAGRAM



- = Binary Calendar Year Coding Scheme
- = Assembly Plant Code = Specific Device Code

ĖĊ, ED

&Y

&Z

&G = Single Digit Weekly Data Code

ORDERING INFORMATION

See detailed ordering and shipping information on page 2 of this data sheet.

FSV340FP, FSV360FP

THERMAL CHARACTERISTICS ($T_A = 25^{\circ}C$ unless otherwise noted) (Note 1)

Symbol	ol Characteristic		Unit
Ψ_{JL}	Typical Thermal Characteristics, Junction-to-Lead (Note 2)	10	°C/W
$R_{\theta JA}$	Typical Thermal Resistance, Junction-to-Ambient	140	°C/W

1. Per JESD51–3 recommended thermal test board. Device mounted on FR-4 PCB, board size = 76.2 mm x 114.3 mm.

2. Thermocouple soldered at cathode lead.

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Symbol	Parameter	Conditions		Min	Тур	Мах	Unit
V _F	Forward Voltage	I _F = 3 A	FSV340FP	-	-	0.52	V
			FSV360FP	-	-	0.65	
I _R	Reverse Current	V _R = 40 V	FSV340FP	-	-	160	μΑ
		V _R = 60 V	FSV360FP	-	-	100	
T _{rr}	Reverse Recovery Time	I _F = 0.5 A, I _R = 1 A, I _{rr} = 0.25 A	FSV340FP	-	12.37	-	ns
		I _{ff} = 0.20 A	FSV360FP	-	10.62	-	

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

ORDERING INFORMATION

Part Number	Top Mark	Package	Shipping [†]
FSV340FP	EC	SOD-123EP (Pb-Free/Halogen Free)	3000 / Tape & Reel
FSV360FP	ED	SOD-123EP (Pb-Free/Halogen Free)	3000 / Tape & Reel

+For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

FSV340FP, FSV360FP

TYPICAL PERFORMANCE CHARACTERISTICS

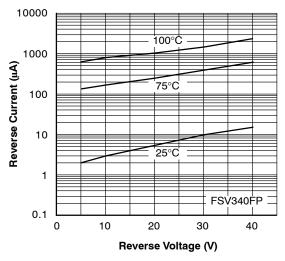


Figure 1. Typical Reverse Characteristics

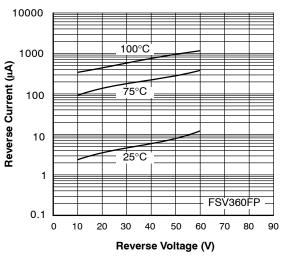


Figure 2. Typical Reverse Characteristics

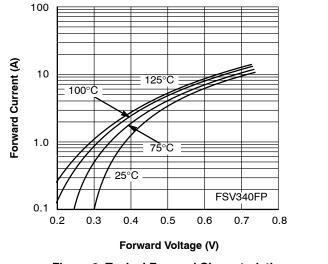


Figure 3. Typical Forward Characteristics

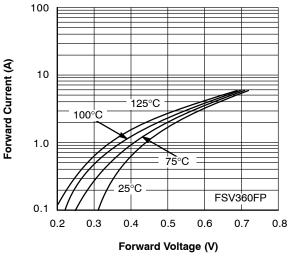


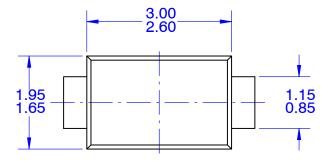
Figure 4. Typical Forward Characteristics

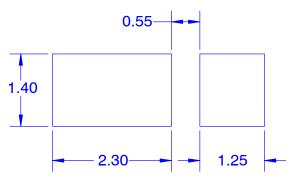
ON Semiconductor[®]



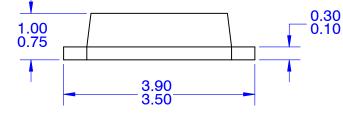
SOD-123EP CASE 425AC ISSUE O

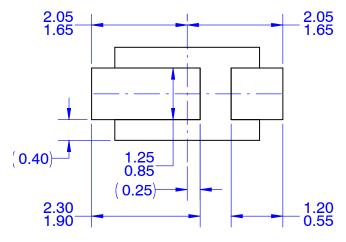
DATE 31 AUG 2016





LAND PATTERN RECOMMENDATION LONG PAD IS CATHODE





NOTES:

- A. NO INDUSTRY STANDARD APPLIES TO THIS PACKAGE.
- B. ALL DIMENSIONS ARE IN MILLIMETERS.
 C. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR PROTRUSIONS.

DOCUMENT NUMBER:	98AON13723G	Electronic versions are uncontrolled except when accessed directly from the Document Repository. Printed versions are uncontrolled except when stamped "CONTROLLED COPY" in red.			
DESCRIPTION:	SOD-123EP PAGE		PAGE 1 OF 1		
ON Semiconductor and ()) are trademarks of Semiconductor Components Industries, LLC dba ON Semiconductor or its subsidiaries in the United States and/or other countries. ON Semiconductor reserves the right to make changes without further notice to any products herein. ON Semiconductor makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does ON Semiconductor assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. ON Semiconductor does not convey any license under its patent rights nor the rights of others.					

ON Semiconductor and 💷 are trademarks of Semiconductor Components Industries, LLC dba ON Semiconductor or its subsidiaries in the United States and/or other countries. ON Semiconductor owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of ON Semiconductor's product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. ON Semiconductor reserves the right to make changes without further notice to any products herein. ON Semiconductor makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does ON Semiconductor assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Buyer is responsible for its products and applications using ON Semiconductor products, including compliance with all laws, regulations and safety requirements or standards, regardless of any support or applications information provided by ON Semiconductor. "Typical" parameters which may be provided in ON Semiconductor data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typical" must be validated for each customer application by customer's technical experts. ON Semiconductor does not convey any license under its patent rights nor the rights of others. ON Semiconductor products are not designed, intended, or authorized for use as a critical component in life support systems or any FDA Class 3 medical devices or medical devices with a same or similar classification in a foreign jurisdiction or any devices intended for implantation in the human body. Should Buyer purchase or use ON Semiconductor products for any such unintended or unauthorized application, Buyer shall indemnify and hold ON Semiconductor and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that ON Semiconductor was negligent regarding the design or manufacture of the part. ON Semiconductor is an Equal Opportunity/Affirmative Action Employer. This literature is subject to all applicable copyright laws and is not for resale in any manner.

PUBLICATION ORDERING INFORMATION

LITERATURE FULFILLMENT

Literature Distribution Center for ON Semiconductor 19521 E. 32nd Pkwy, Aurora, Colorado 80011 USA Phone: 303-675-2175 or 800-344-3860 Toll Free USA/Canada Fax: 303–675–2176 or 800–344–3867 Toll Free USA/Canada Email: orderlit@onsemi.com

N. American Technical Support: 800-282-9855 Toll Free USA/Canada Europe, Middle East and Africa Technical Support:

ON Semiconductor Website: www.onsemi.com

Order Literature: http://www.onsemi.com/orderlit Phone: 421 33 790 2910

For additional information, please contact your local

Sales Representative