

# Schottky Barrier Rectifier, Surface Mount

## FSV340FP, FSV360FP

### Features

- Low Forward Voltage Drop:
  - ◆ FSV340FP: 0.52 V Maximum at 3 A,  $T_A = 25^\circ\text{C}$
  - ◆ FSV360FP: 0.65 V Maximum at 3 A,  $T_A = 25^\circ\text{C}$
- 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 and are RoHS Compliant

### Specifications

#### ABSOLUTE MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

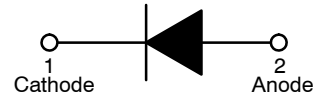
Symbol	Parameter	Value		Unit
		FSV340FP	FSV360FP	
$V_{RRM}$	Recurrent Peak Reverse Voltage	40	60	V
$V_{RMS}$	RMS Reverse Voltage	28	42	V
$V_R$	DC Blocking Voltage	40	60	V
$I_{F(AV)}$	Average Forward Current at $T_L = 75^\circ\text{C}$	3		A
$I_{FSM}$	Peak Forward Surge Current: 8.3 ms Single Half Sine-Wave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

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.

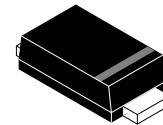


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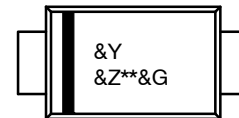


Schottky Barrier Rectifier



SOD-123EP  
CASE 425AC

### MARKING DIAGRAM



Band Indicates Cathode

- &Y = Binary Calendar Year Coding Scheme
- &Z = Assembly Plant Code
- \*\* = Specific Device Code – (FC, FD)
- &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 ( $T_A = 25^\circ\text{C}$ unless otherwise noted) (Note 1)

Symbol	Characteristic	Value	Unit
$\Psi_{JL}$	Typical Thermal Characteristics, Junction-to-Lead (Note 2)	10	$^\circ\text{C}/\text{W}$
$R_{\theta JA}$	Typical Thermal Resistance, Junction-to-Ambient	140	$^\circ\text{C}/\text{W}$

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 ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit	
$V_F$	Forward Voltage	$I_F = 3\text{ A}$	FSV340FP	-	-	0.52	V
			FSV360FP	-	-	0.65	
$I_R$	Reverse Current	$V_R = 40\text{ V}$	FSV340FP	-	-	160	$\mu\text{A}$
		$V_R = 60\text{ V}$	FSV360FP	-	-	100	
$T_{rr}$	Reverse Recovery Time	$I_F = 0.5\text{ A}$ , $I_R = 1\text{ A}$ , $I_{rr} = 0.25\text{ A}$	FSV340FP	-	12.37	-	ns
			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	FC	SOD-123EP (Pb-Free/Halogen Free)	3000 / Tape & Reel
FSV360FP	FD	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

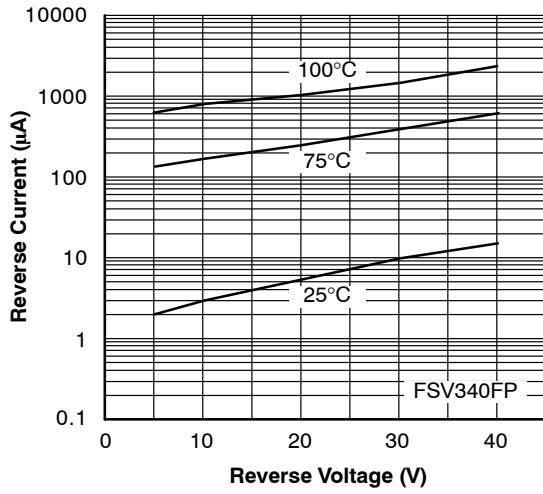


Figure 1. Typical Reverse Characteristics

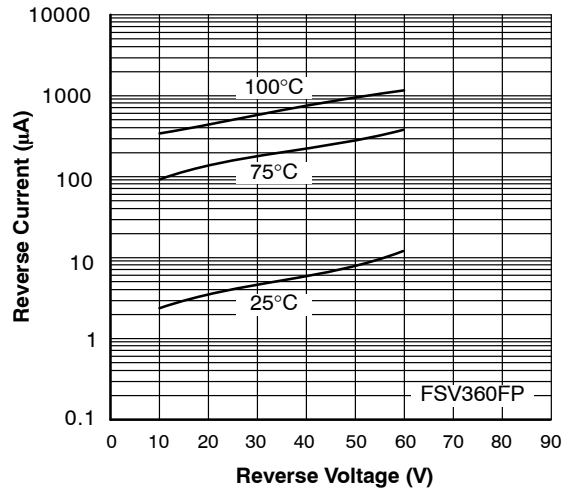


Figure 2. Typical Reverse Characteristics

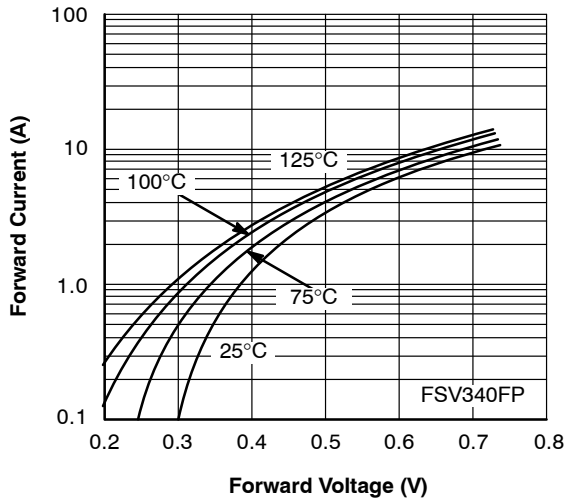


Figure 3. Typical Forward Characteristics

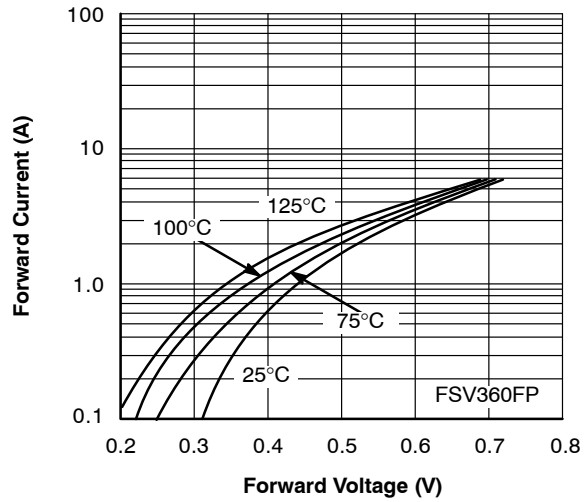


Figure 4. Typical Forward Characteristics

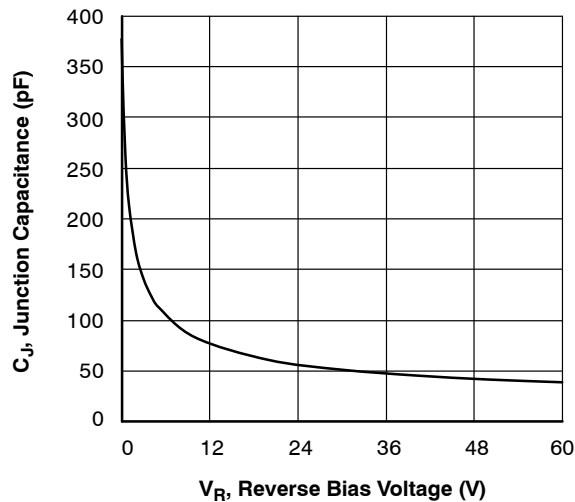


Figure 5. Typical Junction Capacitance

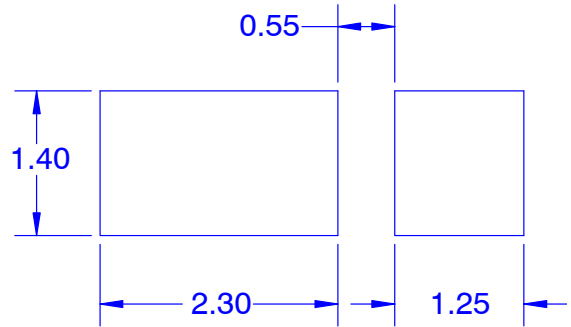
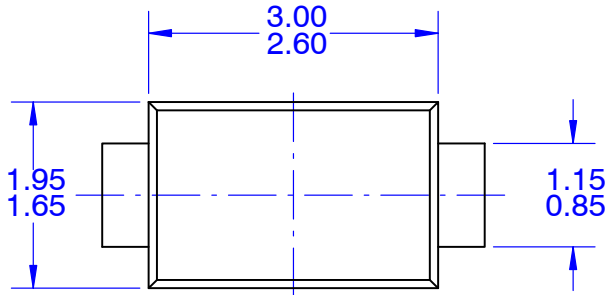
**MECHANICAL CASE OUTLINE**  
**PACKAGE DIMENSIONS**

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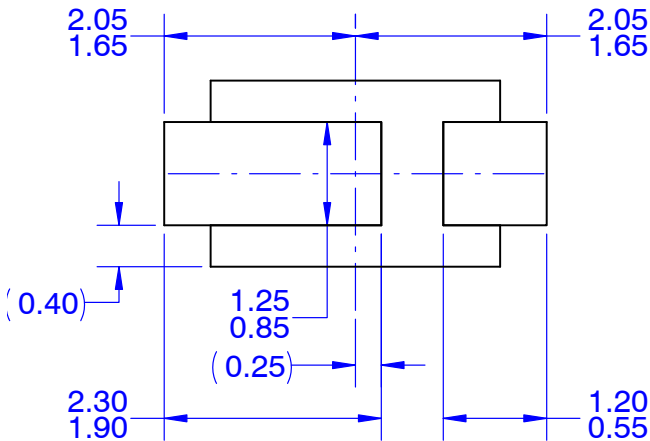
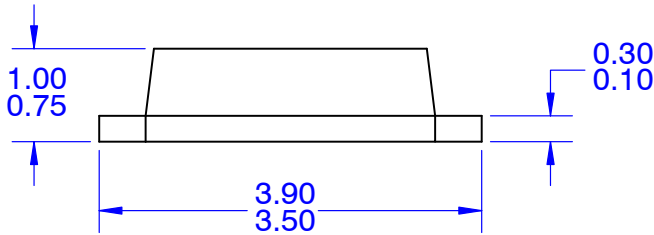


**SOD-123EP**  
**CASE 425AC**  
**ISSUE O**

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.

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