# Schottky Barrier Rectifier, Surface Mount

# FSV340FP, FSV360FP

#### **Features**

- Low Forward Voltage Drop:
  - FSV340FP: 0.52 V Maximum at 3 A,  $T_A = 25$ °C
  - FSV360FP: 0.65 V Maximum at 3 A,  $T_A = 25$ °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**

#### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub> = 25°C unless otherwise noted)

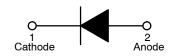
		Value		
Symbol	Parameter	FSV340FP	FSV360FP	Unit
V <sub>RRM</sub>	Recurrent Peak Reverse Voltage	40	60	V
V <sub>RMS</sub>	RMS Reverse Voltage	28	42	V
$V_{R}$	DC Blocking Voltage	40	60	V
I <sub>F(AV)</sub>	Average Forward Current at $T_L = 75^{\circ}\text{C}$	3		Α
I <sub>FSM</sub>	Peak Forward Surge Current: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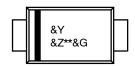
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**Schottky Barrier Rectifier** 



#### 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

1

## FSV340FP, FSV360FP

## THERMAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise noted) (Note 1)

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

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

## **ELECTRICAL CHARACTERISTICS** (T<sub>A</sub> = 25°C unless otherwise noted)

Symbol	Parameter	Conditions		Min	Тур	Max	Unit
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 3 A	FSV340FP	-	-	0.52	V
			FSV360FP	-	-	0.65	
I <sub>R</sub>	Reverse Current	V <sub>R</sub> = 40 V	FSV340FP	-	-	160	μΑ
		V <sub>R</sub> = 60 V	FSV360FP	-	-	100	
T <sub>rr</sub>	Reverse Recovery Time	I <sub>F</sub> = 0.5 A, I <sub>R</sub> = 1 A, I <sub>rr</sub> = 0.25 A	FSV340FP	-	12.37	-	ns
		I <sub>rr</sub> = 0.25 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 <sup>†</sup>
FSV340FP	FC	SOD-123EP (Pb-Free/Halogen Free)	3000 / Tape & Reel
FSV360FP	FD	SOD-123EP (Pb-Free/Halogen Free)	3000 / Tape & Reel

<sup>†</sup>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.

<sup>2.</sup> Thermocouple soldered at cathode lead.

## FSV340FP, FSV360FP

#### TYPICAL PERFORMANCE CHARACTERISTICS

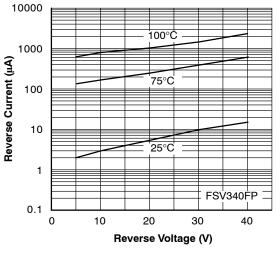


Figure 1. Typical Reverse Characteristics

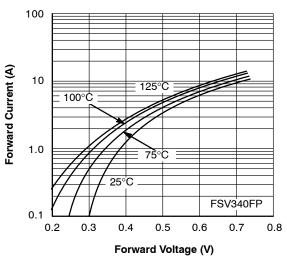


Figure 3. Typical Forward Characteristics

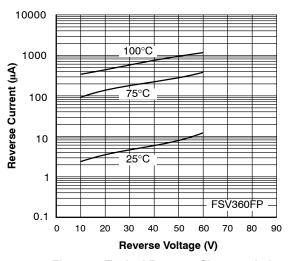


Figure 2. Typical Reverse Characteristics

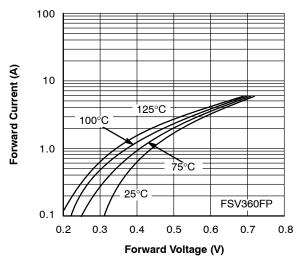


Figure 4. Typical Forward Characteristics

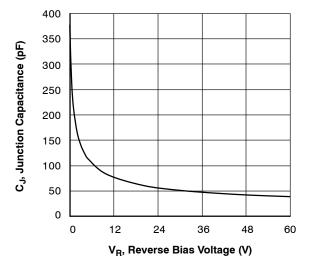
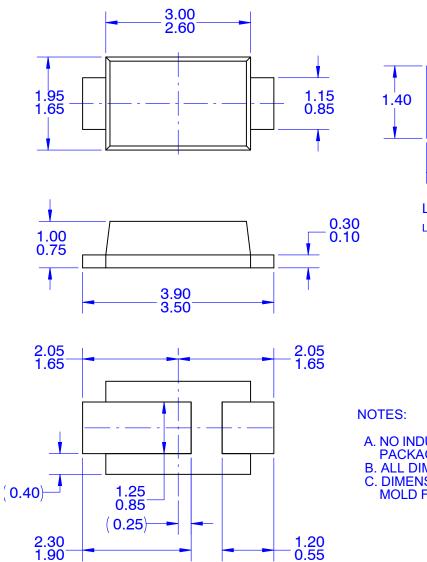
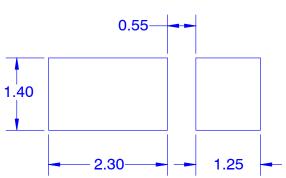


Figure 5. Typical Junction Capacitance

SOD-123EP CASE 425AC ISSUE O

**DATE 31 AUG 2016** 





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