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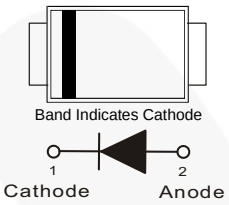
August 2015

FSV340FP / FSV360FP
Surface Mount Schottky Barrier Rectifier

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
- RoHS Compliant / Green Mold Compound
- Industrial Device Qualified per AEC-Q101 Standards.
  * see authorized use policy

SOD-123HE



Ordering Information

Part Number	Top Mark	Package	Packing Method
FSV340FP	FC	SOD-123HE	Tape and Reel
FSV360FP	FD	SOD-123HE	Tape and Reel

Absolute Maximum Ratings

Stresses exceeding the absolute maximum ratings may damage the device. The device may not function or be operable above the recommended operating conditions and stressing the parts to these levels is not recommended. In addition, extended exposure to stresses above the recommended operating conditions may affect device reliability. The absolute maximum ratings are stress ratings only. Values are at T_A = 25°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°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		°C
T_{STG}	Storage Temperature Range	-55 to +150		°C

Thermal Characteristics[1]

Values are at T_A = 25°C unless otherwise noted.

Symbol	Parameter	Value	Unit
ψ_{JL}	Typical Thermal Characteristics, Junction-to-Lead[2]	10	°C/W
$R_{\theta JA}$	Typical Thermal Resistance, Junction-to-Ambient	140	°C/W

Note:

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

Values are at T_A = 25°C unless otherwise noted.

Symbol	Parameter	Conditions		Min.	Typ.	Max.	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	μA
		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
			FSV360FP		10.62		

Typical Performance Characteristics

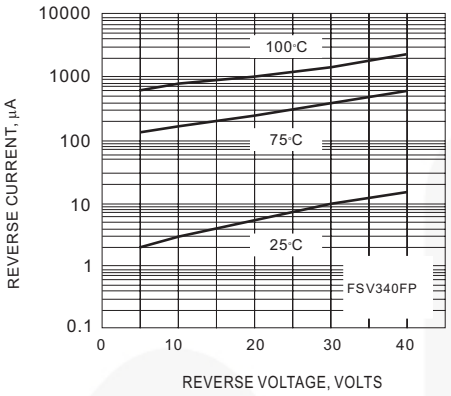


Figure 1. Typical Reverse Characteristics

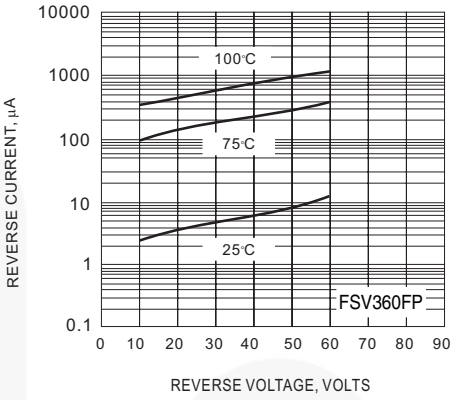


Figure 2. Typical Reverse Characteristics

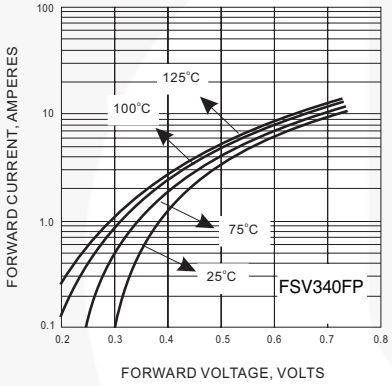


Figure 3. Typical Reverse Characteristics

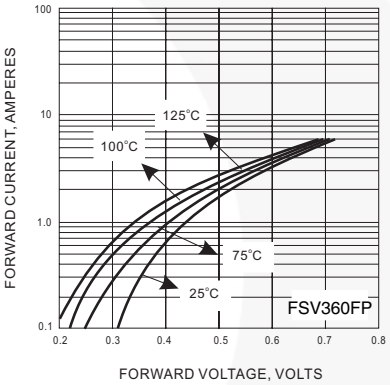
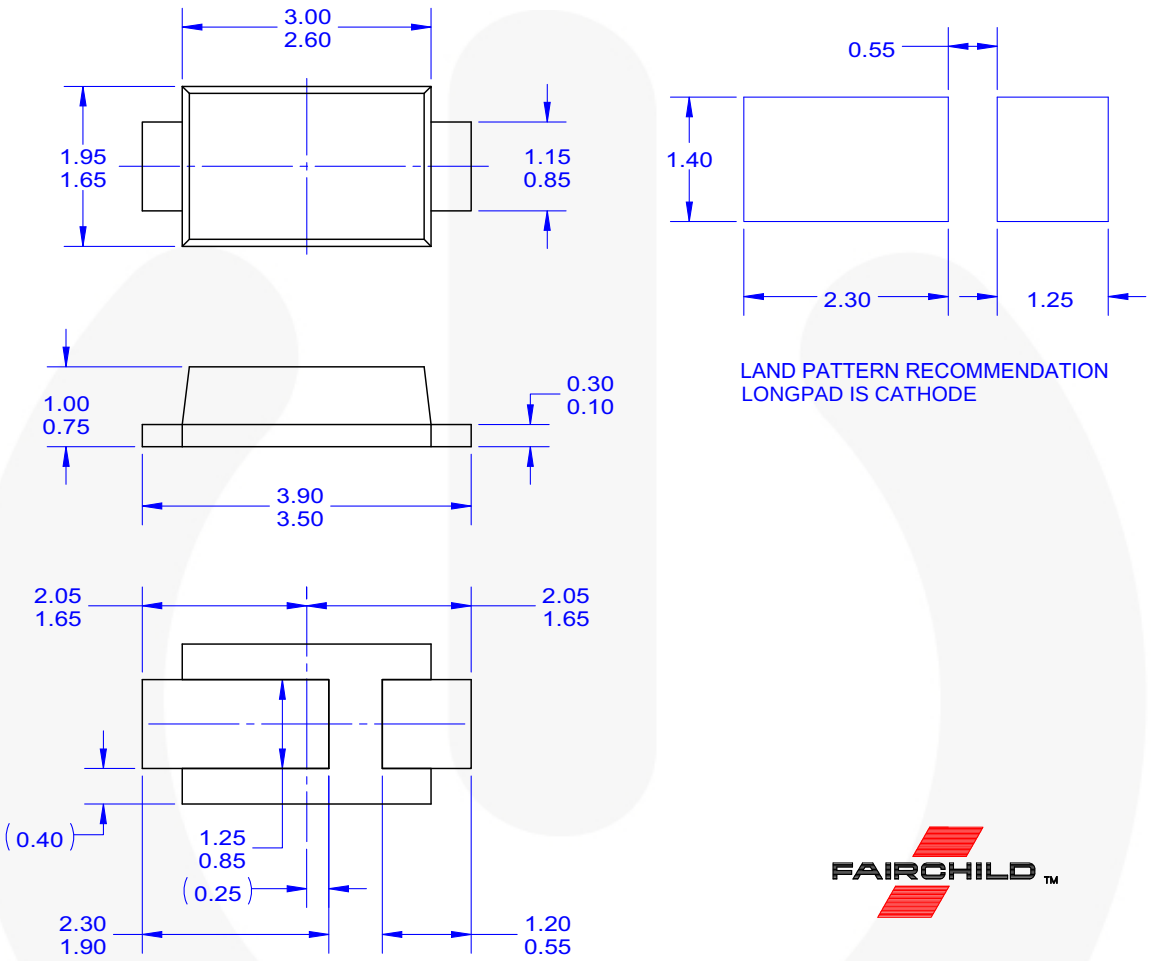


Figure 4. Typical Forward Characteristics

Physical Dimensions



NOTES:

A. THIS PACKAGE DOES NOT CONFORM TO ANY STANDARDS.
B. ALL DIMENSIONS ARE IN MILLIMETERS.
C. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR PROTRUSIONS.
D. DRAWING FILE NAME: MKT-MA02C REV1

Figure 5. 2-LEAD, SOD123HE, NON JEDEC, FLAT LEAD, EXPOSED DAP

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No Identification Needed	Full Production	Datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve the design.
Obsolete	Not In Production	Datasheet contains specifications on a product that is discontinued by Fairchild Semiconductor. The datasheet is for reference information only.

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