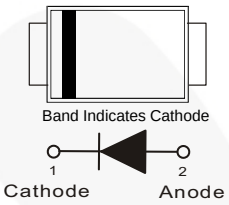
August 2015

FSV330AF / FSV340AF
Schottky Barrier Rectifier

Features

- Low Forward Voltage Drop: 0.5 V Maximum at 3 A, T_A = 25°C
- 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

SMAF



Ordering Information

Part Number	Top Mark	Package	Packing Method
FSV330AF	FSV330AF	DO-214AD (SMAF)	Tape and Reel
FSV340AF	FSV340AF	DO-214AD (SMAF)	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
		FSV330AF	FSV340AF	
V_{RRM}	Recurrent Peak Reverse Voltage	30	40	V
V_{RMS}	RMS Reverse Voltage	21	28	V
V_R	DC Blocking Voltage	30	40	V
$I_{F(AV)}$	Average Forward Current	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

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Thermal Characteristics

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

Symbol	Parameter	Value	Unit
ψ_{JL}	Typical Thermal Characteristics, Junction-to-Lead(1)	20	°C/W
$R_{\theta JA}$	Typical Thermal Resistance, Junction-to-Ambient(2)	150	°C/W

Notes:

1. Mounted on FR4 PCB, single-sided copper, with 48cm^2 copper pad area.
2. Mounted on FR4 PCB, single-sided copper, mini pad.

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				0.5	V
I_R	Reverse Current	$V_R = V_{DC}$, T_A = 85°C				100	μA
T_{rr}	Reverse Recovery Time	I_F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 A	FSV330AF		12.50		ns
			FSV340AF		12.62		
C_J	Junction Capacitance	V_R = 0 V, f = 1 MHz			485		pF

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