

# ES2AF THRU ES2JF

**Surface Mount Superfast Recovery Rectifier**  
**Reverse Voltage - 50 to 600 V**  
**Forward Current - 2 A**

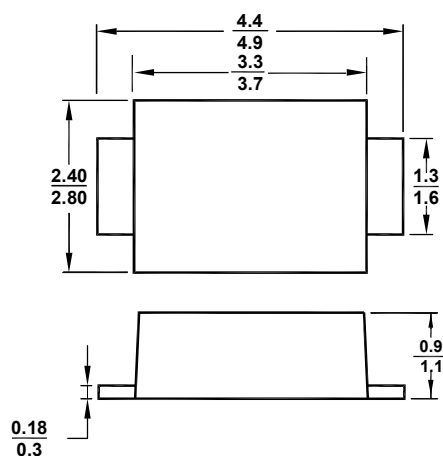
**SMAF**

## Features

- Glass Passivated Chip Junction
- For surface mounted applications
- Low profile package
- Superfast reverse recovery time

## Mechanical Data

- **Case:** SMAF
- **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026



All Dimensions in mm

## Absolute Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

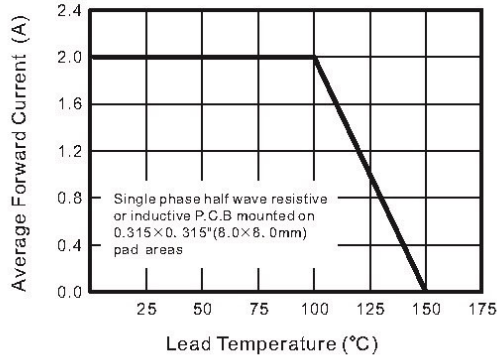
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbols	ES2AF	ES2BF	ES2CF	ES2DF	ES2EF	ES2GF	ES2JF	Units
	Marking	ES2A	ES2B	ES2C	ES2D	ES2E	ES2G	ES2J	-
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	150	200	300	400	600	V
Maximum RMS Voltage	$V_{RMS}$	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current at $T_L=100^\circ\text{C}$	$I_{F(AV)}$	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	50							A
Maximum Forward Voltage at 2 A	$V_F$	1			1.25		1.7		V
Maximum Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	$I_R$	5 100							$\mu\text{A}$
Typical Junction Capacitance at $V_R = 4\text{ V}$ , $f = 1\text{ MHz}$	$C_j$	60							pF
Maximum Reverse Recovery Time at $I_F = 0.5\text{ A}$ , $I_R = 1\text{ A}$ , $I_{rr} = 0.25\text{ A}$	$t_{rr}$	35							ns
Operating Junction and Storage Temperature Range	$T_j, T_{stg}$	- 55 to + 150							$^\circ\text{C}$

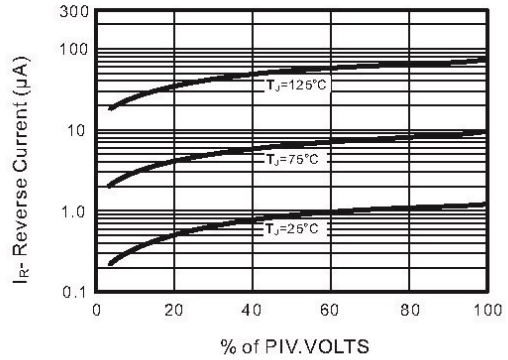
**TOP DYNAMIC**

# ES2AF THRU ES2JF

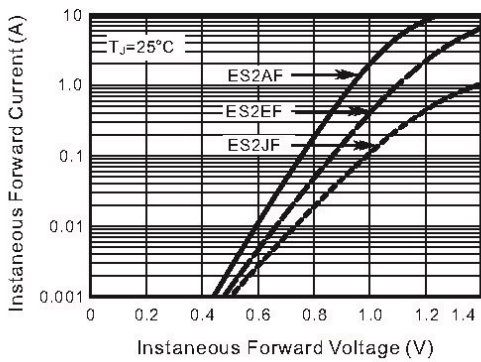
**Maximum Average Forward Current Rating**



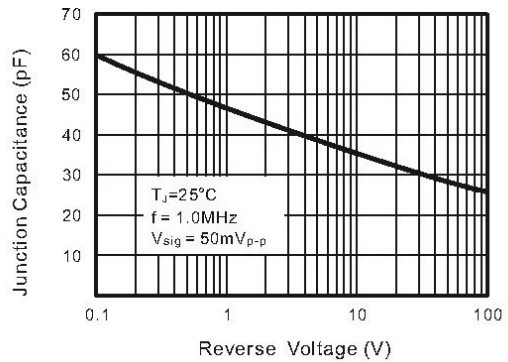
**Typical Reverse Characteristics**



**Typical Forward Characteristics**



**Typical Junction Capacitance**



**TOP DYNAMIC**