

# SSCFES1ADA THRU SSCFES1JDA

#### 1.0Amp Super Fast Recovery Surface Mounted Rectifiers

#### Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ♦ Construction utilizes void-free molded plastic technique
- ♦ Low reverse leakage
- ♦ High forward surge current capability
- High temperature soldering guaranteed 260°C/10 seconds at terminals

#### Mechanical Data

- ♦ Case: Molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- ♦ Polarity: Polarity symbol marking on body
- ♦ Mounting Position: Any

#### PIN configuration



SMA/DO-214AC





<u>Marking</u>

**ES1D: SSCFES1DDA Marking Code)** 

### Absolute Maximum Rating @T<sub>A</sub>=25℃

Parameter	Symbol	SSCFES1						Unit	
raiailleter		ADA	BDA	CDA	DDA	FDA	GDA	JDA	Uiiit
Maximum Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	1.0				А			
Non-repetitive Peak Forward Surge Current		30.0							A
@t=8.3ms	I <sub>FSM</sub>								
Max Instantaneous Forward Voltage at 1.0A	V <sub>F</sub>	1.0 1.3 1.7				1.7	V		
Maximum DC Reverse Current Ta = 25 ℃	I <sub>R</sub>	2.0 200						μА	
at Rated DC Blocking Voltage Ta =100 °C	IR								
Maximum Reverse Recovery Time (Note 1)	Тп	35				ns			
Typical Junction Capacitance (Note 2)	CJ	18.0				pF			
Typical Thermal Resistance	$R_{qJA}$	80.0				°C/W			
Operating Temperature and Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	-55 ~ +150					°C		

Note: 1. Reverse recovery time test condition: IF=0.5A IR=1.0A Irr=0.25A

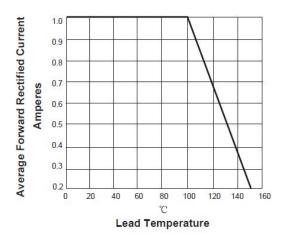
<sup>2.</sup> Measured at 1MHz and applied reverse voltage of 4.0V DC.



# SSCFES1XDA

# Typical Performance Characteristics

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT



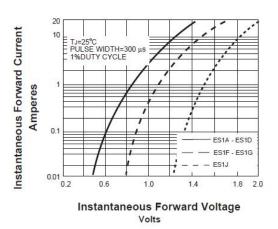
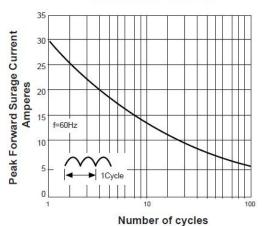
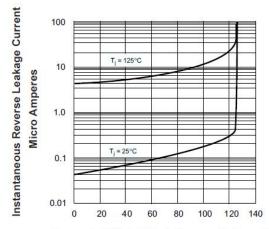


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG





Percent Of Rated Peak Reverse Voltage(%)



# Package Information

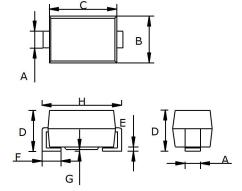
#### **Ordering Information**

Device	Package	Marking	Qty per Reel	Reel Size
SSCFES1ADA	SMA/DO-214AC	ES1A	5000	11 Inch
SSCFES1BDA	SMA/DO-214AC	ES1B	5000	11 Inch
SSCFES1CDA	SMA/DO-214AC	ES1C	5000	11 Inch
SSCFES1DDA	SMA/DO-214AC	ES1D	5000	11 Inch
SSCFES1FDA	SMA/DO-214AC	ES1F	5000	11 Inch
SSCFES1GDA	SMA/DO-214AC	ES1G	5000	11 Inch
SSCFES1JDA	SMA/DO-214AC	ES1J	5000	11 Inch

#### **Mechanical Data**

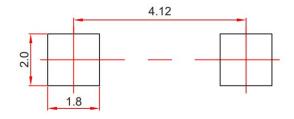
Case: SMA/DO-214AC

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters						
DIN	Min	Nom	Max				
Α	1.40	1.50	1.60				
В	2.50	2.67	2.90				
С	4.00	4.40	4.50				
D	2.00	2.25	2.45				
E	0.05	0.200	0.203				
F	0.76	1.14	1.52				
G	-	-	0.203				
Н	4.90	5.0	5.30				

# Recommended Pad outline (Unit: mm)



# SSCFES1XDA



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