

### Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 200 V

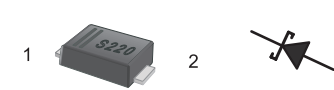
Forward Current - 2.0A

#### Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View  
 Marking Code: DS22W ---S22  
 DS24W ---S24  
 DS26W ---S26  
 DS28W ---S28  
 DS210W ---S210  
 DS212W ---S212  
 DS215W ---S215  
 DS220W ---S220

Weight : 17mg , 0.0006 oz  
 Simplified outline SOD-123FL and symbol

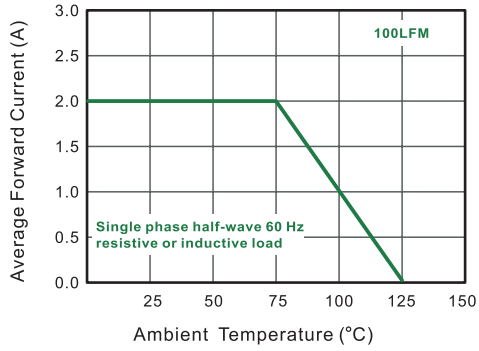
#### Absolute Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

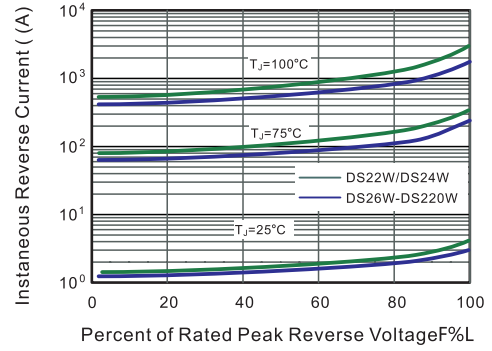
Parameter	Symbols	DS22W	DS24W	DS26W	DS28W	DS210W	DS212W	DS215W	DS220W	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50				40				A
Max Instantaneous Forward Voltage at 2 A	$V_F$	0.55		0.70		0.85		0.95		V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	$I_R$	0.5			0.3			5		mA
Typical Junction Capacitance <sup>1)</sup>	$C_j$	220			80				pF	
Operating Junction Temperature Range	$T_j$	-55 ~ +125								°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150								°C

1) Measured at 1MHz and applied reverse voltage of 4 V D.C.

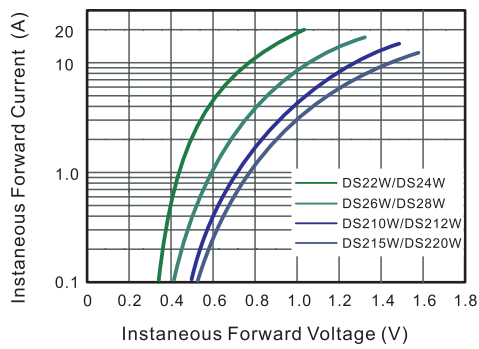
**Fig.1 Forward Current Derating Curve**



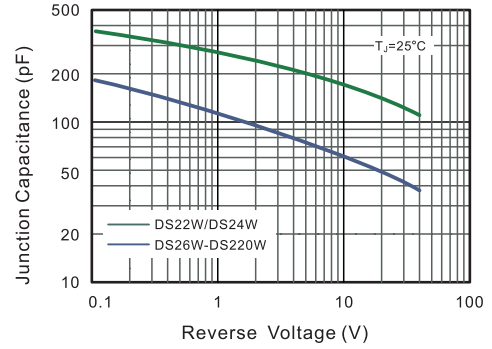
**Fig.2 Typical Reverse Characteristics**



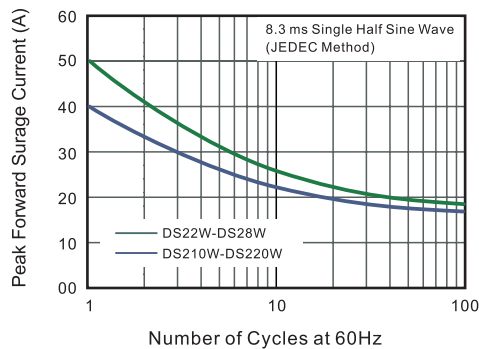
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



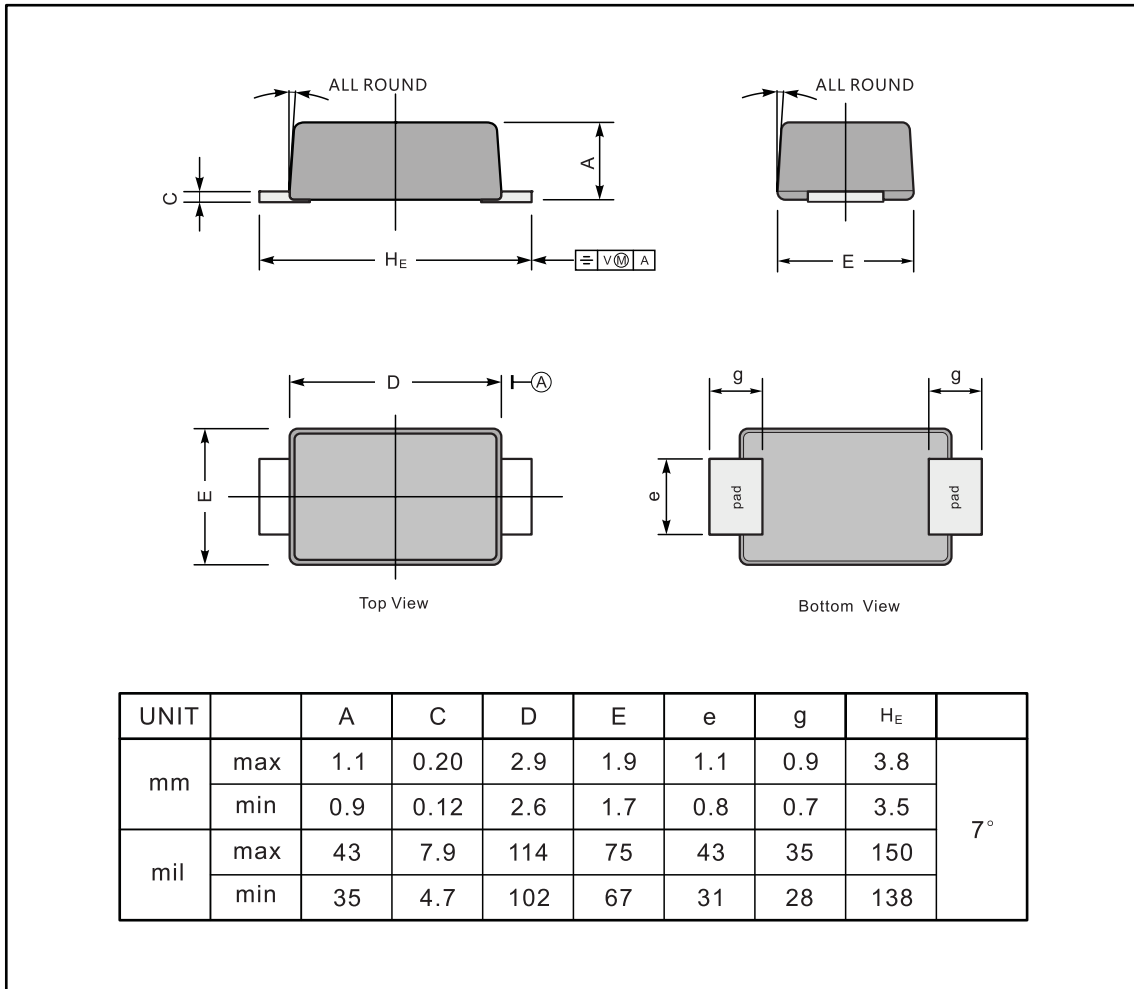
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



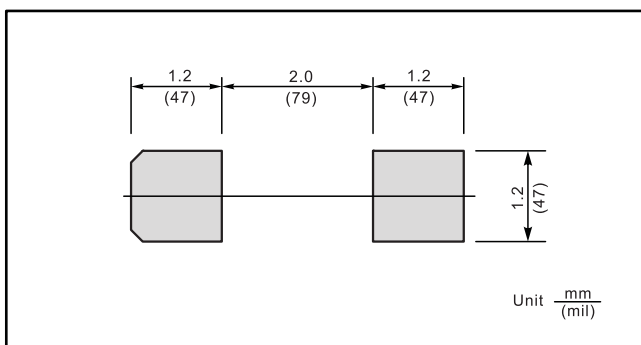
### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD123FL



### The recommended mounting pad size



### Marking

Type number	Marking code
DS22W	S22
DS24W	S24
DS26W	S26
DS28W	S28
DS210W	S210
DS212W	S212
DS215W	S215
DS220W	S220