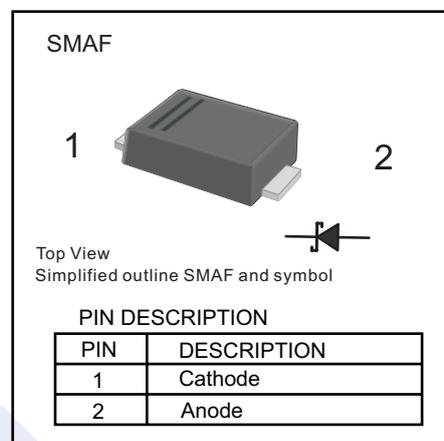


## Schottky Barrier Diodes

## SS12F ~ SS120F

## ■ 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

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$  unless otherwise specified

Parameter	Symbol	SS 12F	SS 14F	SS 16F	SS 18F	SS 110F	SS 112F	SS 115F	SS 120F	Unit	
Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	120	150	200	V	
Surge Peak Reverse Voltage	$V_{RSM}$	14	28	42	56	70	84	105	140		
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	120	150	200		
Instantaneous Forward Voltage at 1A	$V_F$	0.55		0.7		0.85		0.9			
Averaged Forward Current	$I_O$	1									A
Peak forward surge current	$I_{FSM}$	40				30					
Maximum DC Reverse Current at rated DC blocking voltage	$I_R$	$T_A=25^\circ\text{C}$ 0.3		$T_A=100^\circ\text{C}$ 10		0.5 2		0.1 2		mA	
Typical Junction Capacitance *1	$C_j$	110			80				pF		
Typical thermal resistance *2	$R_{thJA}$	95									$^\circ\text{C}/\text{W}$
Junction Temperature	$T_j$	150									$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to 150									

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

\* 2. Mounted on glass epoxy PC board with  $4 \times 1.5'' \times 1.5''$  (3.81×3.81 cm) copper pad.

## ■ Marking

NO.	SS12F	SS14F	SS16F	SS18F	SS110F	SS112F	SS115F	SS120F
Marking	SS12	SS14	SS16	SS18	SS110	SS112	SS115	SS120

# Schottky Barrier Diodes

## SS12F ~ SS120F

### ■ Typical Characteristics

Fig.1 Forward Current Derating Curve

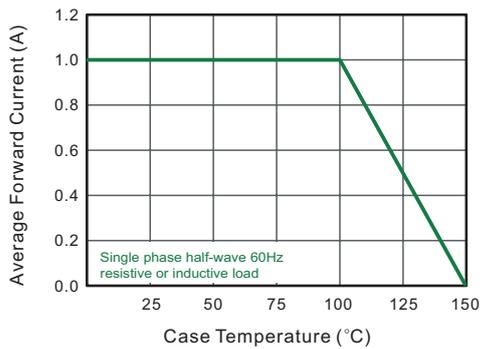


Fig.2 Typical Reverse Characteristics

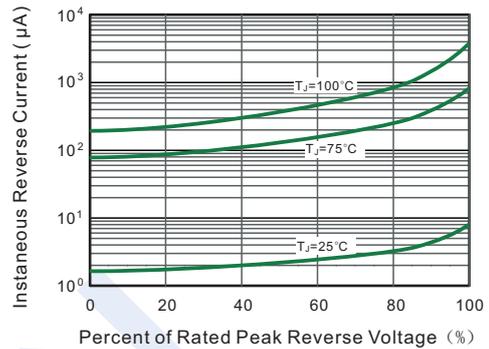


Fig.3 Typical Forward Characteristic

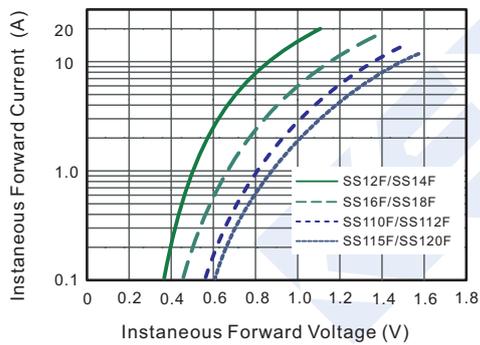


Fig.4 Typical Junction Capacitance

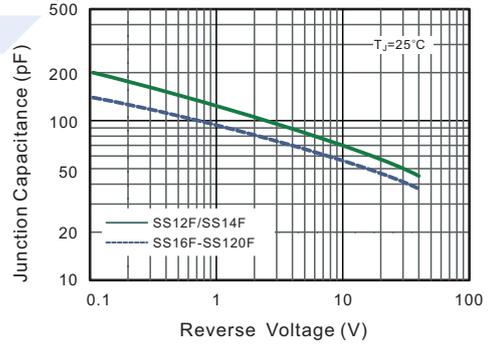


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

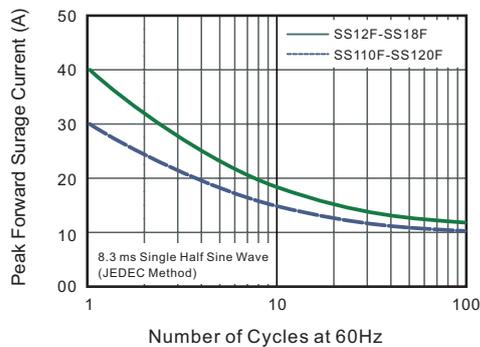
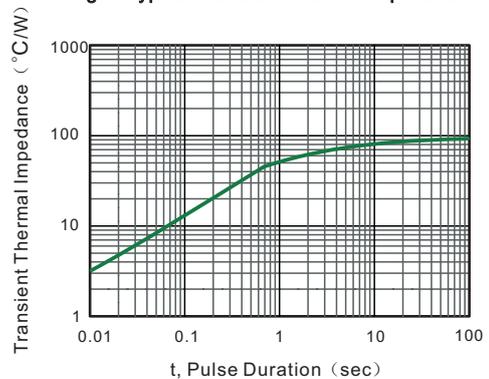


Fig.6- Typical Transient Thermal Impedance



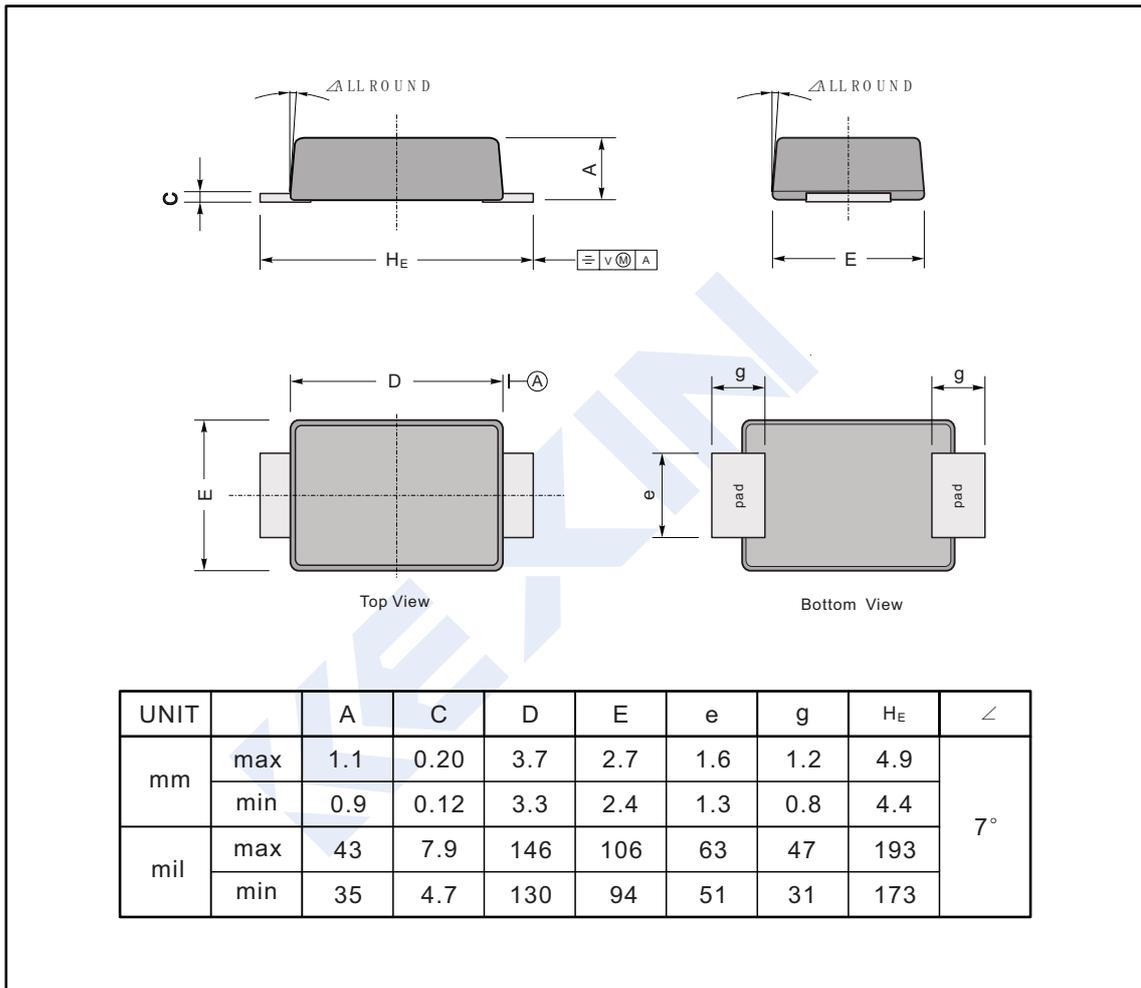
### Schottky Barrier Diodes

### SS12F ~ SS120F

■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SMAF



■ The Recommended Mounting Pad Size

