

# SS24-HF Thru. SS220-HF

Reverse Voltage: 40 to 200 Volts

Forward Current: 2.0 Amp

RoHS Device Halogen Free



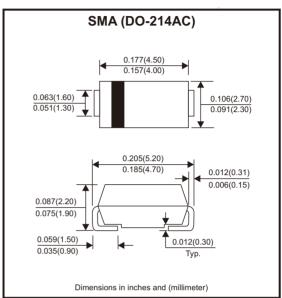
#### **Features**

- 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.

#### Mechanical data

- Case: SMA

- Terminals: Solderable per MIL-STD-750, method 2026.



#### **Circuit Diagram**



#### **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	SS24-HF	SS26-HF	SS210-HF	SS215-HF	SS220-HF	Units
Maximum repetitive peak reverse voltage	VRRM	40	60	100	150	200	٧
Maximum RMS voltage	VRMS	28	42	70	105	140	٧
Maximum DC blocking voltage	VDC	40	60	100	150	200	V
Maximum average forward rectified current	l <sub>F(AV)</sub>	2					А
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	Іғѕм	50				А	
Max instantaneous forward voltage at 2A	VF	0.55	0.70	0.85	0.95		٧
	lr		0.5 5 0.3 3			mA	
Typical junction capacitance (Note 1)	C <sub>j</sub> 220 80			pF			
Typical thermal resistance (Note 2)	Reja	80					°C/W
Operating junction temperature range	Tj	-55 ~ <b>+</b> 150				°C	
Storage temperature range	Tstg		-55 ~ +150			°C	

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

QW-JB082

2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

## **SMD Schottky Barrier Rectifiers**



Rating and Characteristic Curves (SS24-HF Thru. SS220-HF)

Fig.1 - Forward Current Derating Curve

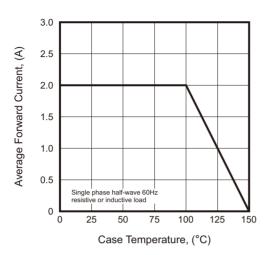


Fig.3 - Typical Forward Characteristic

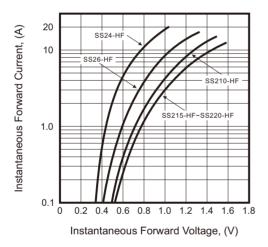


Fig.5 - Maximum Non-Repetitive Peak Forward Surge Current

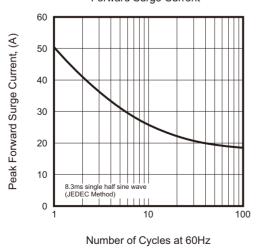
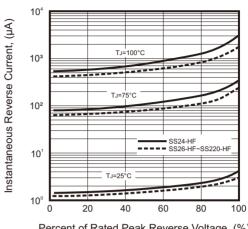


Fig.2 - Typical Reverse Characteristics



Percent of Rated Peak Reverse Voltage, (%)

Fig.4 - Typical Junction Capacitance

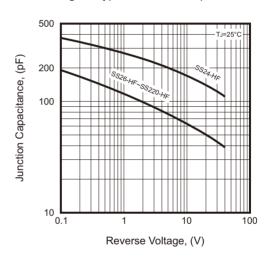
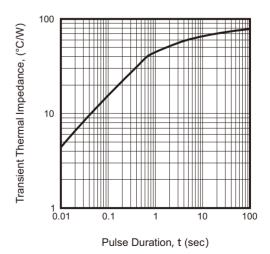
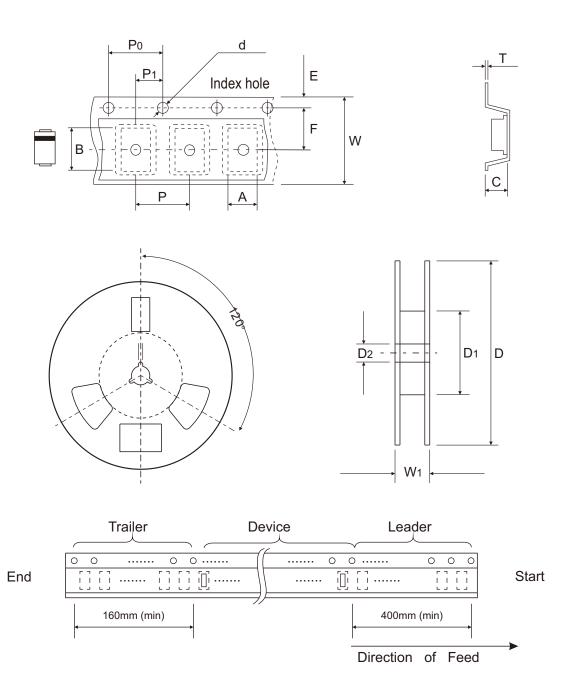


Fig.6 - Typical Transient Thermal Impedance





### **Reel Taping Specification**



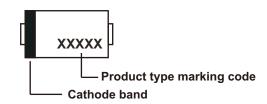
	SYMBOL	Α	В	С	d	D	D1	D2
DO-214AC (SMA)	(mm)	2.70 ± 0.10	5.33 ± 0.10	2.35 ± 0.10	1.55 ± 0.05	330 ± 2.00	75.00 ± 1.00	13.00 ± 0.20
	(inch)	0.106 ± 0.004	0.210 ± 0.004	0.093 ± 0.004	0.061 ± 0.002	12.992 ± 0.079	2.953 ± 0.039	0.512 ± 0.008

	SYMBOL	E	F	Р	P <sub>0</sub>	P1	Т	W	<b>W</b> 1
DO-214AC (SMA)	(mm)	1.75 ± 0.10	5.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.20 ± 0.03	12.00 ± 0.30	14.70 + 2.00 - 1.00
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.008 ± 0.001	0.472 ± 0.012	0.579 + 0.079 - 0.039



### **Marking Code**

Part Number	Marking Code
SS24-HF	SS24
SS26-HF	SS26
SS210-HF	SS210
SS215-HF	SS215
SS220-HF	SS220

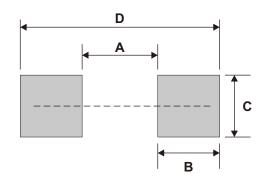


xxxx/xxxxx = Product type marking code

#### **Suggested PAD Layout**

SIZE	DO-214AC (SMA)			
OIZE	(mm)	(inch)		
Α	2.20	0.087		
В	1.80	0.071		
С	1.80	0.071		
D	5.80	0.228		

Note: 1. The pad layout is for reference purpose only.



#### **Standard Packaging**

	REEL PACK			
Case Type	REEL (pcs)	Reel Size (inch)		
DO-214AC (SMA)	5,000	13		

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Comchip Technology:

SS220-HF SS24-HF SS210-HF SS26-HF SS215-HF