# **Surface Mount Schottky Barrier Recitifiers**

# Reverse Voltage - 20 to 100Volts Forward Current - 2.0 Amperes

#### **Features**

- Low power loss, high efficiency
- For surface mounted applications
- Low forward voltage drop
- High surge capacity
- Meet UL flammability classification 94V-0

## **Mechanical Data**

- Case: JEDEC SMB molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Note: Products with logo or or or are made by HY Electronic (Cayman) Limited.

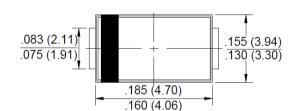
## **Applications**

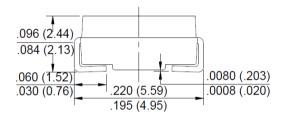
 For use in low voltage, high frequency inverters, polarity protection applications





RoHS COMPLIANT





Package Outline Dimensions in Inches (Millimeters)

# **Maximum Ratings and Electrical Characteristics**

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	SS22	SS23	SS24	SS25	SS26	SS28	SS210	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	20	30	40	50	60	80	100	V
Maximum RMS Voltage	VRMS	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current @T∟=100 °C	l(AV)	2.0							Α
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,	IFSM	50							А
Superimposed on Rated Load (JEDEC Method)	II SIVI								
Peak Forward Voltage at 2.0A DC (Note1)	VF	0.55 0.70 0.85				85	V		
Maximum DC Reverse Current @TJ=25℃	lo.	1.0							mA
at Rated DC Blocking Voltage @TJ=100 $^{\circ}$ C	IK	20							IIIA
Typical Junction Capacitance (Note 2)	CJ	200							pF
Typical Thermal Resistance Junction to Lead	Rejl	15							°C/W
Junction Temperature Range	TJ	-55 to+150							$^{\circ}$
Storage Temperature Range	Тѕтс	-55 to+150							$^{\circ}$

Notes: 1. 300uS pulse width, 2%duty cycle.

- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
- 3. The typical data above is for reference only .

SS2\*-13-00/99-00/01

# **Rating and Characteristic Curves**

#### **SS22 THRU SS210**



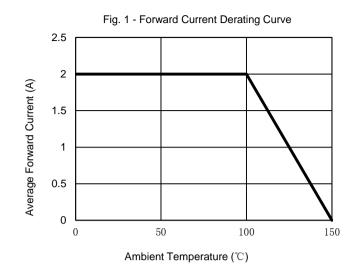


Fig. 2 - Maximum Non-Repetitive Surge Current 60 8.3mS Single Half-Sine-Wave 50 Peak Forward Surge Current (A) (JEDEC METOD) 40 30 20 10 0 10 100 Number of Cycles at 60Hz

Fig. 3 - Typical Reverse Characteristics

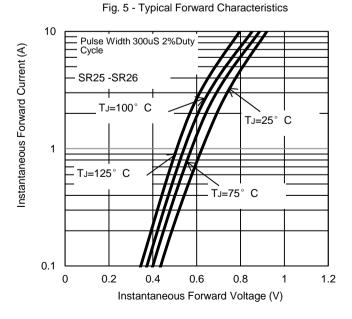
10 Instantaneous Reverse Current (mA) T<sub>J</sub>=125° C 1 TJ=100° 0.1 T<sub>J</sub>=75° C T<sub>J</sub>=25° C 0.01 0.001 20 40 100 Percent of Rated Peak Reverse Voltage (%)

Fig. 4 - Typical Forward Characteristics 10 Pulse Width 300uS 2%Duty Cycle nstantaneous Forward Current (A) SS22 -SS24 TJ=25° T)=100° 0.1

0.4

0.2

0

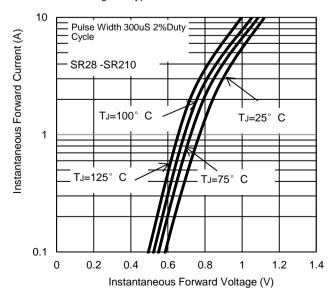




Instantaneous Forward Voltage (V)

0.6

8.0



The curve above is for reference only.

SS2\*-13-00/99-00/01

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